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JOURNAL

2005

March 2006

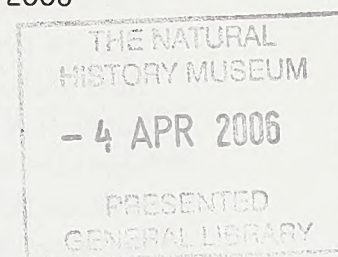
EDINBURGH NATURAL HISTORY SOCIETY

COUNCIL

at January 2006



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The Edinburgh Natural History Society was originally founded in 1869 and incorporates the Edinburgh Field Naturalists and Microscopical Society, instituted in 1881. The Society was instituted for the study of natural history in all its branches, and for the encouragement of public interest and concern in these matters.

An indoor talk is held on one Wednesday every month from September to April, in the Guide Hall, 33 Melville Street at 7.30pm. Posters of date, time and topic are in all libraries. All are welcome. Outdoor excursions are held throughout the year. A copy of the programme for Summer 2006, and details of membership of the Society can be obtained from the Secretary.

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PRESIDENT'S RAMBLINGS

Welcome to the Edinburgh Natural History Society Journal for 2005. Once again the Journal is a tribute not only to the breadth of interest within the Society, as shown by the variety of excursions, speakers and contributions from members, but also the hard work and commitment of all those involved: the Excursion Committee for organising the excellent programme of field excursions, covering a remarkable range of subjects and destinations; Margaret Perry for organising so efficiently, speakers for the indoor meetings; Council members for their contribution to the running of the Society; Eunice Smith and her 'team' for the provision of the teas and coffees at indoor meetings; Janet Watson and co. for once again organising a very successful Christmas party; and last, but by no means least, Sandra Stewart and Lyn Blades for the immense work that they willingly and quietly put into the annual production of a Journal that reflects so well on our Society. As always, our thanks to all involved in these tasks, without whom our Society would not exist.

Our thanks also go to Margaret Watson who has decided, after many years of leading interesting and popular excursions, to hang up her boots as a leader. We hope that she will still participate in future excursions. Another popular and adventurous leader, Bill Baird, has moved to the Moray Firth area, but hasn't totally escaped the Nats, as he will be leading one of the days during our long excursion in Nairn in June.

In last year's Journal you may remember that we were celebrating the launch of the new Nats website. This has proved to be an excellent resource for the Society, with much interest being shown in the pages. Even better, we have had six new members joining through the site. If you haven't yet had an opportunity to browse the site you can find it at www.edinburghnaturalhistorysociety.org.uk. Any contributions or suggestions for the development of this site will be gratefully received.

With best wishes to all for a happy and successful 2006 stuffed full of natural history.

Natalie Taylor

OBITUARIES

ANNE DAVIDSON

Anne died on 29th May this year. She was a long-standing member of the Nats, having joined in 1970, after many years as secretary in Rannoch School in Perthshire. She was in the ATS during the war, and spent time in Turkey, which she often talked about. She was a keen walker and had a great love of the countryside. She is remembered with affection.

ALISTAIR SCOTT

Alistair led several Nats walks, in the grounds of the Astley Ainslie, Lauriston Castle and Carberry Tower. His enthusiasm for his subject was infectious and his walks were very enjoyable. His book *A Pleasure in Scottish Trees* gives a great deal of pleasure. He sadly died on 10th December.

Geoffrey Harper

This article was originally intended to be a report of the talk 'Kola to Kamchatka' given to the Society on 26 October 2005. The slides shown on that evening illustrated trips to the Kola Peninsula in northern Fennoscandia, the Putorana Mountains and neighbouring tundra near the lower reaches of the River Yenisey, and the volcanoes of Kamchatka on the Pacific coast.

Interspersed with the colour slides of plants and scenery were some truly abysmal black-&-white pictures from Russian textbooks to illustrate the ecology of the Russian Arctic - and in particular the pervasive influence of the permafrost. This is the 'hidden' side of the Russian Arctic, generally not visible since it is underground. The next few pages are intended to complement the talk by presenting some of the information in a bit more detail.

Vegetation zonation

For the ecologist, one of the great advantages of the Old World, as opposed to North America, is the absence of massive mountain chains running in a north-south direction. Of course there are the Urals, separating Europe from Asia, but mostly these are more like hills than mountains, and do not exert the profound effect on climate that the Rockies and Appalachians do in North America. As a result, the natural vegetation of northern Eurasia is aligned approximately along the lines of latitude, as one might expect in a 'textbook' world in which vegetation varies according to the succession of climates from the hot tropics to the cold Arctic.

The vegetation profile below shows a simplified version of the sequence from south (right) to north (left) in much of the former Soviet Union. This area does not take in the tropics, but in the south, summer is certainly hot, and also dry (the deserts of Central Asia). Curiously, the left end of the diagram (the far north) is also desert - the polar desert. This can look surprisingly like some deserts in Central Asia - stony wastes with very few plants, owing to lack of water. In the case of the polar desert it is so cold that any water there is frozen and most of the time the plants cannot absorb it. So, despite the massive change in summer temperatures along the north-south profile, there is an unexpected symmetry in it, with desert at each end, forest in the middle, and transition zones north and south of the forest. This suggests that water supply, as well as temperature, is important in the vegetation zonation.



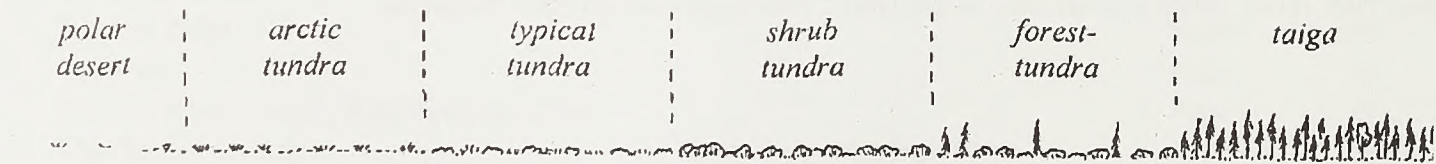
Forest Tundra

The southern edge of the forest zone is almost entirely deciduous, often oak, with conifers (pine) only on dry sandy areas. Towards the north, spruce gradually enters the forest to form mixed conifer-deciduous forest, and further north still the conifers - mostly spruce in the west and larch in the east - become dominant to form the northern boreal forest or *taiga*.

At the northern limit of the forest the trees thin out, with tundra vegetation between, and the reason for this wide spacing of the trees is often to do with the massive root systems, many times wider than the narrow crowns of the trees. These extensive roots are needed if the trees are to gather enough water and nutrients, given the low temperature of the soil, which even in summer may be a layer only centimetres or tens of centimetres thick overlying the permafrost. The characteristic spike-like crowns of the forest-tundra trees are thought to be an adaptation to the direction from which the light comes - mostly sideways, given the low angle of the sun even in summer.

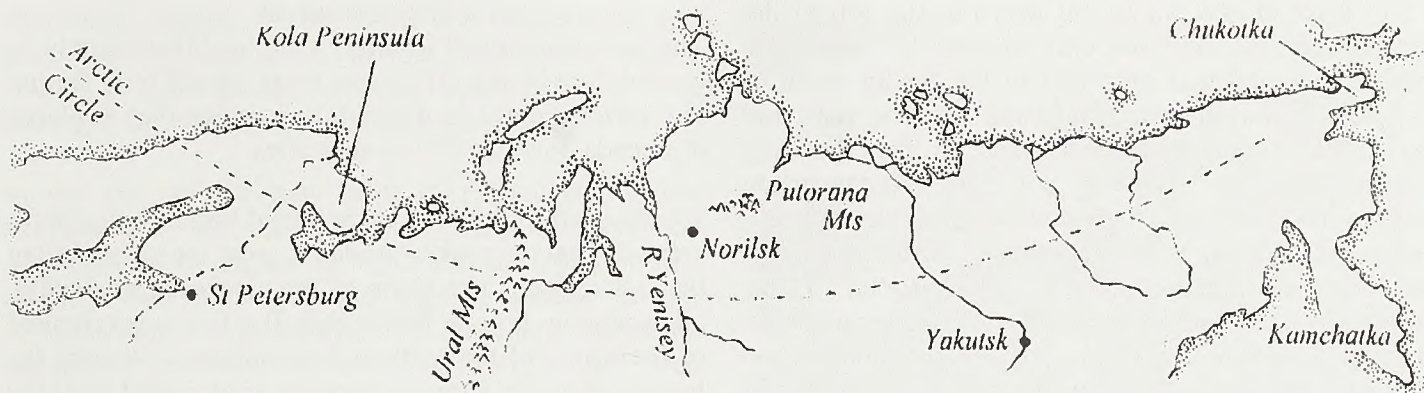
The true tundra begins where the trees disappear. In the southern tundra they are replaced by shrubs (mostly dwarf birch, alder and willows) 1-2 m high, and also trees kept down to that height by the depth of the snow cover: anything poking above the snow in winter gets killed by the cold winds and driven ice particles. In eastern Siberia important constituents of this shrub tundra are an alder *Alnus fruticosa* and the Dwarf Siberian Stone Pine *Pinus pumila* (of which there is a fine specimen at the north-west corner of the Rock Garden at the Botany).

Further north these large shrubs become smaller, and are replaced by dwarf shrubs only a few centimetres high, including species of *Vaccinium*, *Dryas*, *Salix* and *Cassiope*.



NORTH

A profile of natural vegetation types across the former Soviet Union, from the coast of the Arctic Ocean (left) to



They are interspersed with abundant mosses. This is the typical tundra, which covers an enormous area of mostly flat land. As conditions become more severe towards the Arctic Ocean, the vegetation cover thins out and there are fewer species. This is the arctic tundra. Finally, continuous vegetation cover disappears altogether, leaving a few saxifrages, sedges and other plants in isolated patches. This is the polar desert.

These zones are not arranged exactly parallel to lines of latitude, as one might expect them to be if the northern hemisphere were entirely terrestrial. Some of the main departures from a strictly latitudinal zonation are caused by ocean currents. Along the Pacific coast, cold currents keep the climate cool, and the tundra extends far to the south. So Kamchatka, although on the same latitude as Britain, has quite an arctic feel to it. By contrast the ocean currents keeping Britain warm mean that the vegetation zonation is distorted in the opposite direction, especially on the west coast. So, even in Scotland we have approximate equivalents of all the main zones from the deciduous forest northwards. The oakwoods correspond to the deciduous forest zone; the Caledonian pine woods to the *taiga*; the montane scrub (being reconstructed at Ben Lawers and elsewhere) to the shrub tundra; and the heaths on exposed summits to typical and arctic tundra. However, our Scottish 'examples' of some of these zones are not entirely convincing. In the case of the *taiga*, Britain never received spruce after the last ice age, and some of the *taiga* herbs have almost or actually disappeared (eg Alpine Blue Sow Thistle *Cicerbita alpina*). Our tundra-like vegetation is not sitting on permafrost, and enjoys a different climate to that of true tundra (no polar day or polar night here!). So we must be cautious in drawing parallels between our Scottish vegetation and the typical zones in northern Russia.

Tundra-steppe

The superficial symmetry across the vegetation zones of northern Eurasia sheds some light on how the vegetation of western Europe developed after the last ice age. If the forest zones are made possible only by

the provision of adequate moisture, then arid climates will not support forest, whatever the temperature.

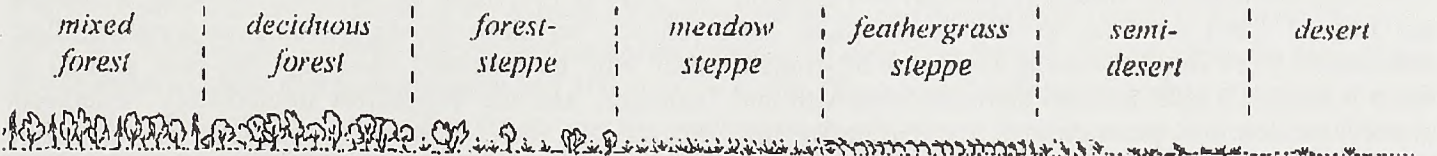
Imagine the middle being chopped out of the vegetation profile, with the result that the steppe and tundra come to lie next to each other: where they met they would merge to form a transitional type of vegetation - the tundra-steppe, including elements of both tundra and steppe. This kind of vegetation is still found in a few dry parts of eastern Siberia.

The importance of the tundra-steppe for us is that parts of western Europe, possibly including Britain, may have been covered in it after the last ice age. The coming and going of ice ages are not always accompanied by simple migration of fauna and vegetation southwards and then northwards again: if there are other changes in climate, such as lower rainfall, then the species existing at the time may have combined to form kinds of vegetation quite unknown to us today, or found only as small relict patches. It is difficult to imagine the mammoths subsisting on modern tundra, but it makes more sense if their habitat was the much more nutritious tundra-steppe. It is possible that the modern tundra is of comparatively recent origin - a sort of northern degenerate derivative of the earlier tundra-steppe, which was split into northern and southern zones by the extension of the forest zone across Asia.

Patterned ground

The Arctic is famous for various kinds of 'patterned ground'. These display regular patterns in the vegetation. A very common type is the so-called 'spotted' or 'medallion' tundra, comprising low mounds about a metre across separated by a polygonal network of trenches a few centimetres deep. The pattern shows up particularly clearly in spring, when snow remaining in the trenches outlines the mounds.

'Spotted' tundra is one manifestation of the permafrost, and there has been much debate about how it causes the pattern. During winter the soil is frozen to the surface, but once the snow melts heat can enter the ground, and



SOUTH

the hot deserts of Central Asia (right). Without the forest, the tundra and steppe would merge (tundra-steppe).

a thin layer of soil thaws out down to the top of the permafrost. My one and only attempt to investigate the phenomenon was on a trip to the tundra north of Norilsk. Unfortunately spring was late that year, and the 'spotted' tundra looked rather as in the drawing. An excavation to discover the depth of the unfrozen soil did not take long: there was solid ice immediately under the layer of moss and grass, with at most a centimetre of unfrozen soil. Lacking tools, I was unable to penetrate further down. Whatever causes the original pattern of cracks, it can easily be understood how heat penetrates the ground under the trenches far more slowly than under the humps - not only on account of the late-lying snow in the trenches but also because the wet vegetation in them slows down the rate at which the sun's weak rays can warm the ground. The top of each mound is often bare of vegetation, with the surface itself broken by cracks due to drying. This bare ground absorbs heat much faster than where there are plants. In late summer, removal of the unfrozen soil would show that the top of the permafrost forms a network of ridges corresponding to the trenches on the surface, while under each mound would be a mirror-image depression in the permafrost.



Spotted Tundra*

People may rave about glaciers, geysers, volcanoes, coral reefs and tropical rain forests, but to my mind one of the wonders of the natural world is another of these kinds of 'patterned ground' found in the Arctic - the 'polygonal mires'. I have always been fascinated by photographs of them, and then I was delighted to see some, just once, when flying back from the tundra to Norilsk by helicopter. It seems extraordinary that ice and vegetation can between them produce the remarkably geometrical patterns - sometimes a grid of squares, but more often a pattern of polygons. In dimensions they are about an order of magnitude larger than the 'medallions' of the spotted tundra, in other words about 10-20 m across. Like the 'medallions' they are separated by trenches, and these run along ridges which may be up to a metre above the centre of each polygon. The basins may be dry or waterlogged, or actually have standing water, forming ponds. If the trenches and polygons are waterlogged, the only reasonably well drained ground is the tops and sides of the ridges, and so trees in the forest-tundra are confined to these strips, forming a network of straight lines. It truly is a most unusual landscape. As with the spotted tundra, the permafrost is higher under the trenches, and an excavation would reveal a network of ridges on the upper surface of the ice in summer.

The permafrost

The permafrost itself is rarely seen, and then mostly in eroded river banks. Of course, there we see only the top few metres, and it is difficult to imagine that in places it extends down to 400 or so metres.

We are used to thinking of Scotland buried - except for a few mountain peaks - under a great ice sheet during the last ice age. The signs of the glaciation are visible all around us here in Edinburgh. But this is not typical of the whole of the northern hemisphere. We bore the burden of an ice sheet on account of abundant snowfall as well as low temperatures. In most of Siberia, on the other hand, snowfall was much less, as it is today, and it is doubtful if there was an extensive ice sheet. Instead, the ice formed underground, and we can think of the permafrost as a subterranean ice sheet. In Britain the ice sheet melted comparatively rapidly, as the air temperature rose, but the same did not happen to the permafrost. It is still there.

The diagram on the next page shows a simplified profile through the forest-tundra and *taiga* zones. During the ice ages the permafrost would have extended from the surface deep underground, down to at least the depths shown. After the ice age it melted gradually down to about 100 m in the north and perhaps 200 m in the south, leaving intact most of the tens-of-thousands-of-years-old 'ice sheet'. Since then a new subsurface layer has been developing, partly under bogs as they spread at the expense of trees.

It is interesting that the profile shows deep trenches or even complete breaks in the permafrost under rivers. This illustrates the importance of heat flow into and out of the ground. The main rivers flow from the south, bringing heat from a warmer climate, and my guess is that this importation of heat from outside the permafrost region either prevents the formation of permafrost or melts it faster than would be possible simply with heat from the sun on the ground above.

Note also how there are patches of new permafrost beside each river, immediately under the floodplain. These are forming presumably for the same reason as the permafrost under bogs (see below).

Climate change

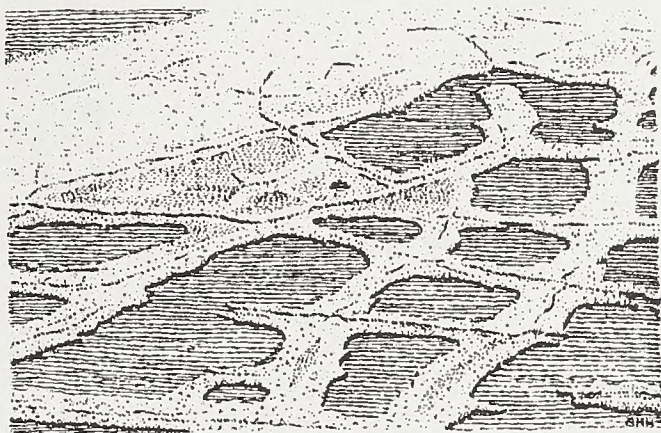
It is a curious fact that, in places, higher temperatures due to climate change are being accompanied by extension of the permafrost. What happens to the permafrost depends very much on the annual balance between heat absorbed in summer and heat lost in winter. These energy flows occur across the surface of the ground, and the result depends on the insulation and conducting qualities of a thin layer of vegetation and water at the surface. Just a layer of moss can significantly reduce heat absorption from the sun's rays, so that if the moss is stripped away by a passing vehicle, let alone by the building of a railway line, heat will be absorbed faster by the bare ground in summer, and the permafrost immediately underneath begins to melt. Massive changes to landscape (thermokarst) can occur when there is widespread disturbance to the fragile vegetation, which may take

decades to recover, owing to the low temperatures and poor growing conditions. In the lecture there were a couple of photographs showing what happens to a railway line when the ground under it melts!

In the case of the new layer of permafrost, higher temperatures due to climate warming may be accompanied by higher precipitation (rain and snow), and it is this that encourages bogs to spread. In turn the bogs reduce heat absorption in summer, and so the permafrost spreads. At the same time, it has been reported recently that there is evidence of permafrost melting - as seen in satellite photos showing lakes getting smaller. Why should less water suggest melting of the permafrost? Surely melting permafrost implies more water - and this has indeed been claimed for certain other parts of the Arctic. The explanation suggested for the contracting lakes relies on the reason why the lakes are there in the first place - because of bad drainage, and the bad drainage is due to the permafrost. If the permafrost melts, it is like punching holes through the clay lining of a dewpond: there is then nothing to stop the water draining away through cracks in the ice layer.

If the permafrost is melting in some places, there could be serious implications for climate change. This is because large amounts of methane could be released into the atmosphere. Methane is a more powerful greenhouse gas than carbon dioxide, and this will almost certainly increase the rate at which the atmosphere warms up.

Another worrying change in the Arctic is the loss of sea ice. This results in more heat from the sun being absorbed by the sea, and less being reflected back into space. Another effect of having less sea ice - which draws fresh water from the sea and makes it more salty - is to make the sea *less* salty. Yet another problem is that there is increased flow of water in the rivers leading to the Arctic Ocean, and this also makes the sea less salty. The reduced saltiness may alter the flow of ocean currents, and particularly the Gulf Stream, which keeps Scotland warm in winter. So I personally take quite seriously the idea that Scotland

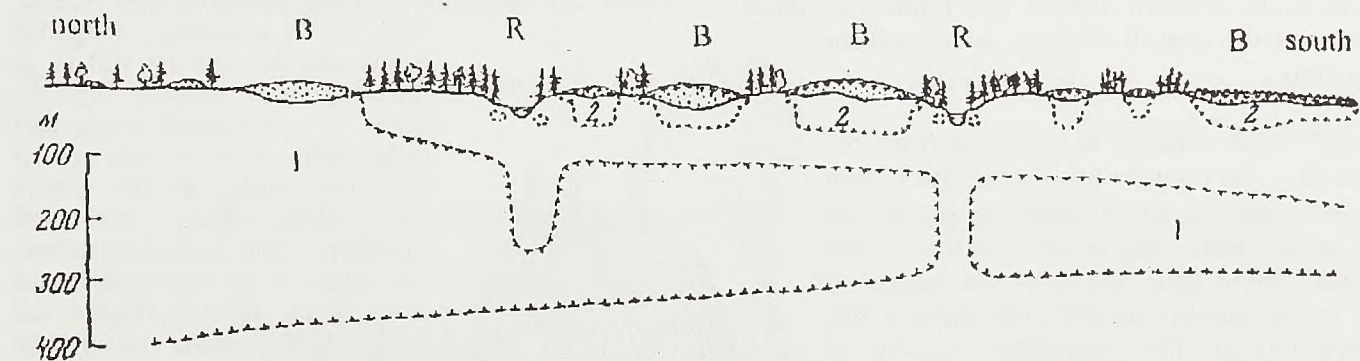


'Polygonal' mires

could be in for much severer winters at some time in the future - and all because of global warming! What happens in the Arctic may play a crucial role in the future of our weather here in Scotland. Actually I'm quite looking forward to much colder winters: I haven't managed to get on my cross-country skis for several years, and I'd welcome the opportunity.

In retrospect

I enjoyed my trips to the Russian Arctic, and hope there'll be a chance to see other areas. From two of the trips I came back feeling I understood a bit more about Scotland. Kamchatka is famously a land of volcanoes, and of course Scotland was once too. Edinburgh, North Berwick and Fife are littered with their remains. Kamchatka showed me what Central Scotland might have been like several hundred million years ago. The Kola Peninsula, on the other hand, showed what Scotland was probably like before we humans wrecked the natural ecosystems. The Khibiny Mountains, which we explored, are remarkably like the Highlands in shape, and the main difference is in the vegetation. With far fewer sheep and deer, the vegetation looks more natural, and except for the spruce trees the forest and montane scrub probably look very much like our own of c.8000 years ago. For anyone wishing to 'reconstruct' Scottish vegetation as it once was, a trip to the Kola Peninsula or some other part of northern Fennoscandia is a 'must'.



Profile (from a Russian textbook) of the permafrost through the taiga and forest-tundra zones of Siberia. The vertical scale on the left is in metres. The permafrost sheets labelled '1' date from the last ice age, when the ground was frozen down to about 400 m in the north and 300 m in the south. The gap and depression in the permafrost are due to rivers on the surface above. After the ice age the whole area would mostly have been under forest and forest-tundra, but since then much of the forest has been replaced by bogs, under which new permafrost has formed (areas '2'); in the north this new permafrost has joined up with the 'ice age' permafrost.

RED SQUIRRELS IN ALSTON, CUMBRIA

23rd September - 2nd October 2005

Roddy Clark

What a thrill it was for me to have two separate sightings of this beautiful mammal, after coming to this magnificent, spectacular area every year regularly since 1997, the year after this society introduced me to it when we stayed at Barhaugh Hall in the South Tyne River valley between Alston and Haltwhistle. In all these years this was my first sighting of this exquisite animal, not long after the coach had left Haltwhistle. All I saw was a quick flash of slender red running across the road. This was in the vicinity of a tiny hamlet called Park Village.

My second sighting was in grounds familiar to those veterans of this society's Barhaugh Hall Holiday of 1996 - yes, yes !! the grounds of Thortergill tea-room. Now this was a superb sighting. The Red Squirrel suddenly appeared, then ran quickly along the lawn in front of the tea-room, halted to decide what direction to take, scaled the low wall bordering the lawn, scampered across the drive between the tea-room and the owner's house, climbed effortlessly up a tree trunk and opened the box containing food. The feed box was beautifully sited for observation purposes from the door of the tea-room - near enough to see the Red Squirrel through my binoculars, but far enough away so as not to disturb it, so I had a lovely time studying it. It really is a gorgeous animal - a rich, rich red with a perfectly-shaped red-brown tail. Then suddenly it had taken its fill and in a flash it was down the tree trunk, across the driveway, down the wall, across the lawn and finally across the private footbridge over the stream to the blacksmith's forge and into the dense woodland. What an amazing speed ! How lucky I was to be there at just the right time, and in the right place.

I was even more delighted when the owner of the tea-room said that she and her family were aware of 6 Red Squirrels on their land, some of which could be young ones. The feed box has a metal lid, and she has observed that some of the Squirrels are not experienced enough to remain on the feed box if the metal lid accidentally comes down with a sharp sound, but run down the trunk in alarm instead. She thinks that these must be juvenile ones at the box, judging from that reaction.

I also got much valuable information from the local people - the country bus driver, the Alston taxi driver (who is also a farmer), the Alston garage owner who runs a taxi service. The farmer/taxi driver said that over the course of several recent months he had seen quite a few Red Squirrels in the immediate vicinity of Alston. He regularly sees them in the valley of the River West Allen near a hamlet of Whitfield.

But now, sad to say, I come to an alarming situation which I hope will not get worse. The area enclosed by Hexham - Haltwhistle - Penrith

- Alston - Thortergill/Garrigill - Nenthead - Allenheads - Allendale Town has been for a long time a bastion of the Red Squirrels but it is being invaded by the Grey. I was told of two sightings - one at a farm south of Barhaugh Hall, the other right in Alston itself, at the primary school. But the local population of Alston is fighting this invader. A number of locals are active in protecting, conserving and giving shelter to the Red Squirrel, as well as monitoring its population level: an ex-forester who owns the Mt. Hooly plantation north-east of Alston; an owner whose land includes a riverine belt of woodland at Natrass Gill, where a small stream joins the River South Tyne; and one of the garage owners in Alston.

During the holiday I was told of an organisation called Red Alert, whose aim is to monitor, protect and conserve the Red Squirrel population levels. They also give advice and assistance, and provide education to schools and children. Some of the advice is geared towards how woodlands can be managed to preserve a habitat more suited to the Red Squirrel than to the Grey; and some towards providing feeding boxes for the Red Squirrel. I hold out hope for the Red Squirrel in this area as Thortergill shows the presence of young Squirrels. With local people fighting for the Red Squirrel it has a good number of protectors fighting for its survival against the Grey Squirrel.

The report for the 1996 Barhaugh Hall holiday does not mention Red Squirrels, so my inclusion of them here acts as a postscript to that holiday.

ACKNOWLEDGEMENTS

My thanks to all the local people of Alston, to Thortergill tea-room, and to those others in the area surrounding Alston who gave me such vital information.

FOOTNOTE

Those of you who were at the Barhaugh Hall holiday of 1996 might remember the owners of the tea-room - the Johnston family. Well, they are still there, running the tea-room and the forge, making decorative iron objects.

They are a charming, delightful family and the teas are still of an extremely high standard with the home cooking tradition maintained. However their special Aylesbury ducks are not around now. These ducks were real characters. One, Louis Lowbottom, was always being picked on by the other males; Donald, Hughie and Pughie kept ganging up on him and cornering him against the tea-room door. The four females were targeted too, but to a lesser extent. Only one Guinea Fowl remains now.



A FOX IN THE LION'S DEN?

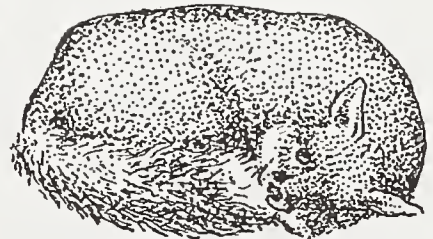
One day this winter I saw a Red Fox crawling through the undergrowth in an empty enclosure on the hilltop of Edinburgh Zoo. The fox climbed over the enclosure wall onto the footpath. For several minutes it wandered over the hilltop. As the fox appeared to be in a relaxed frame of mind, it behaved as if people were not a threat. This enabled me to get very close.

At times I was only about a metre away from the fox. I believe that I may have seen another fox heading to Corstorphine Hill. After several minutes other visitors seemed to notice it on its way down to the lion's den. Many people noticed the fox, but paid little attention, as they found looking at caged animals more interesting. Though the photos I managed to take were not of the greatest quality, some were reasonable. Eventually the fox returned to where I have often seen them, above the Vicuna enclosure. I have not spotted any foxes in the zoo since, but I did see the African Wild Dogs eating what appeared to be a dead fox. Hopefully it was not.

Patrick Adamson

FOXES IN ELLIOT PLACE

One Saturday morning at 9.30 I saw a Fox in the back garden in Elliot Place, Colinton, running beside the boundary wall. Just before onset of winter 2005 I was startled to see a fox in the middle of the back lawn, curled up having a snooze. Its only movement was to rearrange itself into a more comfortable sleeping position. The other instance was when my gardener disturbed one in the greenhouse. Both were startled! We have had Foxes in our back garden for quite a few years, but the behaviour of these ones was more novel.



Roddy Clark

..... IN CRAIGLEITH

I photographed a Fox sunbathing in my back garden. Although I disturbed it, it soon came back and settled down again for a snooze.

Dorothy Stuart

..... and in CHAMBERLAIN ROAD

I have not seen my fox in the garden this year, but it has often left its calling card on my doorstep! It is still about.

Elizabeth Farquharson



A snowdrop, Mrs McNamara, planted in October 2004, bloomed on 9th December 2004 and on 20th December 2005. By Christmas Day 2005 one flower was out and four buds.

Eileen Perry

Graham Checkley

Introduction

The purpose of this article is to provide a species account of the distribution of Odonata in Holyrood Park and Duddingston/Bawsinch for the summer 2005 season. Full length electronic versions of this document, with plans for future monitoring, may be obtained from GrahamCheckley@AOL.com

Background

The Scottish Wildlife Trust Invertebrate Survey of Bawsinch and Duddingston Loch (Hawswell and Sommerville, 2003) recorded the presence, at least historically, of Blue-tailed Damselfly (*Ischnura elegans*), Azure Damselfly (*Coenagrion puella*) and Common Darter (*Sympetrum striolatum*) in the reserve. The only Odonata recorded during the survey itself was Black Darter (*S. danae*), but historical records for this species were also mentioned in the report. Also, anecdotal evidence suggested that at least two species, namely Emerald Damselfly (*Lestes sponsa*) and Black Darter, had been lost from the Bawsinch reserve in the recent past with Large Red Damselfly (*Pyrrosoma nymphula*) as a gain. Within Holyrood Park itself, the *SWT Invertebrate study of Holyrood Park* (Saville and Sommerville, 1991) refers to '50 Common Blue Damselfly (*Enallagma cyathigerum*) at Dunsapie Loch', but after that date only incidental observations indicated the presence of any Odonata in the park.

In addition to the above, discussions with the Bawsinch convenor, the Historic Scotland Ranger Service and the Lothian Wildlife Information Centre during early 2005 suggested that while there was a body of knowledge extant on the Odonata of the area, little if any systematic survey work had taken place for a number of years.

Aims and Objectives

To undertake a survey to identify the Odonata species currently present in the area and to gain an understanding of their current distribution and breeding behaviour.

Methodology - Survey Areas

The areas surveyed were:

- St Margaret's Loch
- Hunter's Bog
- Wells o' Wearie (3 ponds south of the Innocent Railway) *
- Duddingston/Bawsinch reserve *
- North side of Duddingston Loch from the Boat House to Hangman's Rock
- Dunsapie Loch
- Accessible slopes between the Crow Hill / Nether Hill tops of Arthur's Seat
- and the Duddingston to St Leonards Road



BLACK DARTER
seems to have been lost to
the area since 2003

In each case, as well as the water bodies themselves, the surrounding vegetation areas were also examined to determine the limits of Odonata movement away from actual or potential breeding sites. It should be noted that the areas indicated with an asterisk are not normally accessible in full to the public.

Exclusions

Time constraints did not allow the Glebe Meadow, the 4th Wells o' Wearie pond or the west end of Duddingston Loch north from the Innocent Railway to Hangman's Rock to be surveyed in 2005.

Counting methods by location

Due to the variable frequency and unequal number of visits to each location, the analysis carried out to date is a simple illustration of peak counts by species and location. A more systematic scheme of visits in the future might allow the production of a year on year 'abundance index' for individual species.

Methods

Surveys were carried out in line with the weather condition parameters employed for the Butterfly Monitoring Scheme (BMS, 2005). Counts were only made under suitably warm and bright weather conditions, when wind speeds were light, and between the hours of 11am and 4pm. The minimum BMS criteria are either 13-17°C with at least 60% sunshine, or 18+°C without rain (can be cloudy).

Counts were taken by species for each location, along with separate counts of any Odonata copulating or ovipositing, the counting method or methods employed for each site being shown in the table on the following page. Visits were made from 30th May to 5th September, but due to time constraints they were made with highly varying frequency. Also, again due to time constraints, where a site was noted as clear of Odonata for more than two visits it was excluded from subsequent survey work during the season.

Site surveys would be better continued for all sites through to the end of the season, in order to avoid the possibility of the emergence of any late broods.

Issues around the identification of female Odonata are not considered a major constraint to understanding at this stage, as there were no instances of a site being populated only by unidentified females, or of a high preponderance of females over males.

Duddingston/Bawsinch

The area of Butterbur north and west of the Carse Pond, and the Butterbur north and east of The Outlet (between the Carse Pond and the Gunn Pond) appear to provide important early season resting areas for Damselflies. These areas were gradually abandoned as the Butterbur grew, after which time the Damselflies tended to be seen over the Carse, Gunn, Rock Trap and Volunteer Ponds, with a single Common Hawker being seen over the latter pond in late July. Hangman's Rock and the area of short grass immediately to the east provided a major resting and copulating area for Common Blue Damselfly through into July.

The Rock Trap pond was noted as an ovipositing site for Large Red and Azure Damselfly, with the Gunn pond being used for ovipositing by Common Darter.

It should be noted that the area of Butterbur between the Carse Pond and The Outlet will be removed as part of the planned reed bed extension during winter 2005/6. The effects of this change will need to be monitored in subsequent surveys.

Holyrood Park

Dunsapie Loch continues to provide a breeding site for Common Blue Damselfly, but numbers appear to be significantly reduced from those reported in 1984 (Saville and Sommerville, 1991).

Hunter's Bog now appears to support Blue-tailed Damselfly, along with some Common Darter and an occasional Common Hawker, although there is no evidence to date to confirm the breeding of any of these species.

The west and east ponds of the Wells o' Wearie south of the line of the Innocent Railway support breeding Common Darter, with Common Blue Damselfly and a single Common Hawker also being noted. The water quality of the middle pond appears to be different from the other two and this issue has been raised with Joe Muir, the Historic Scotland Park Manager.

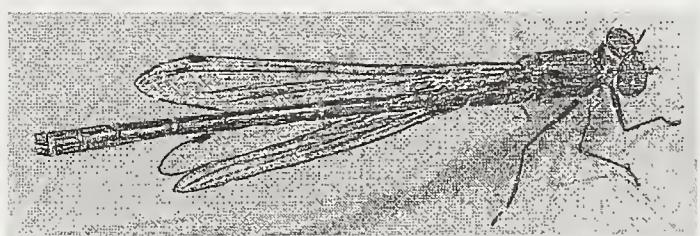
This survey suggests that St Margaret's Loch remains entirely empty of Odonata, for reasons unknown.

Further Study/Work

The survey work in 2005 did not provide accurate early season counts of Azure and Common Blue Damselfly at Duddingston/Bawsinch or at the Wells o' Wearie. Also the Glebe Meadow, the 4th Wells o' Wearie pond and the west end of Duddingston Loch were not surveyed. In order to fill these gaps and provide additional data on known locations, further survey work is proposed for summer 2006. Details of this are on the web site.

Conclusions

The summer 2005 Odonata survey of Holyrood and Duddingston/Bawsinch in Edinburgh established the presence of six species. This list included Large Red Damselfly (*Pyrhosoma nymphula*), a local biodiversity action plan priority species (EBAP, 2004). This survey recorded no Black Darter (*Sympetrum danae*) at any of the sites, suggesting that this species has been lost to the area at some point since 2003.



Large Red Damselfly

Results

Noted range of flying periods

Species	Comments
Large Red Damselfly	Seen from 30/05 to 05/07
Blue-tailed Damselfly	Seen from 24/05 to 25/08
Common Blue	Quite probably under-represented due to incomplete counts of this species at the start of the season. Seen from 03/07 to 01/08
Azure Damselfly	Quite probably under-represented due to incomplete counts of this species at the start of the season. Seen from 24/05 to 26/07
Common Hawker	Seen from 13/07 to 01/08
Common Darter	Seen from 22/07 to 05/09. Could be present through into early October depending on weather conditions and habitat (personal observation).

Peak Species Counts by Location

Species	Hunter's Bog	Wells o' Wearie	Bawsinch	Hangman's Rock	Dunsapie Loch	Peak Count
Large Red Damselfly	0	0	5	0	0	5
Blue-tailed Damselfly	4	0	21	1	0	26
Common Blue Damselfly	0	1	15	12	9	37
Azure Damselfly	0	0	4	0	1	5
Common Hawker	1	1	1	0	0	3
Common Darter	2	12	7	0	0	21

Breeding Activity Observed (Copulating pairs / ovipositing females)

Species	Hunter's Bog	Wells o' Wearie	Bawsinch	Hangman's Rock	Dunsapie Loch	Peak Count
Large Red Damselfly			Yes			1
Blue-tailed Damselfly						
Common Blue Damselfly					Yes	1
Azure Damselfly			Yes			1
Common Hawker						
Common Darter		Yes	Yes			2

Acknowledgements

My particular thanks to Betty Smith, Colin McLean, Jenny Hargreaves and Natalie Taylor for their encouragement, and diligent criticism, in the production of this paper.

Graham is a Volunteer Ranger with the Historic Scotland Ranger Service Service.

ALEXANDERS *Smyrniolum olusatrum*

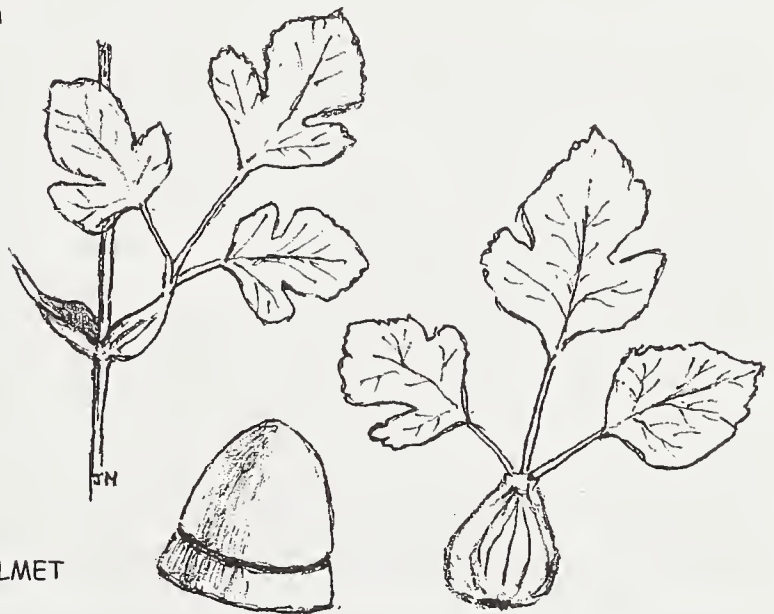
Margaret Perry

The illustrious name of this plant is remarkable amongst the humbler names given to many of our wild flowers, for instance, Cudweed, Bogbean, Fleabane, Lousewort and so on. The common English name is said to be derived from the shape of the swollen leaf stalks of the upper leaves, which when pulled back, resemble the shape of Alexander the Great's helmet. A more likely explanation is offered by the plant's country of origin, around the town of Alexandria, in North Africa. The generic name is from the Greek word for myrrh and the specific name from the Latin *olus-atrum* (vegetable - black herb).

Alexanders was listed by the botanist Theophrastus, in 322BC, its cultivation as a pot-herb described by Pliny in the first century AD, and its medicinal properties mentioned by Culpeper. This tall, handsome umbellifer has dark green trefoil leaves, yellow flowers and blackening seeds. It is native to SW Europe and was introduced into Britain at the time of the Romans. The roots taste like Parsnip and the stems, Celery, whilst the leaves were used in salads and the seeds ground up for pepper.

The early flowering season was a boon for the inhabitants after the long, hungry months of winter. Nowadays the plant has reverted to the wild, growing mainly in the coastal areas of Southern Britain. It is also found in isolated coastal regions further north, around the Moray Firth, in scattered locations along the Fife coast, at Yellowcraig and in the Queen's Park, where it may be a relic from Roman times.

A closely related species, *S. perfoliatum*, is becoming an undesirable weed. The gardeners at the Royal Botanic Gardens, Kew are fighting a losing battle to curb the growth of these yellow weeds in the Bluebell plots. Nevertheless, all is not lost for these regally-named plants, for they still have culinary uses in Africa, southern Europe and Asia, as a substitute for Celery. Details of the plants may be found in several Herb Encyclopaedia.



ALEXANDER'S HELMET

..... AND RUST ON ALEXANDERS

Rust fungi, whose name comes from the reddish-brown colour of some of the spores, are parasites which attack many living plants and can cause serious damage to crops. Many are host-specific and they have a complicated, and very interesting, life cycle with up to five spore-producing stages, traditionally designated by numerals 0 to IV. Many rusts lack one or more of these stages and the stages may be spread between two different, usually completely unrelated, host plants. Alternatively, such stages as there are may all occur on the same host. On Alexanders, *Smyrniolum olusatrum*, only one host is involved and its rust, *Puccinia smyrnii*, forms conspicuous yellow elongated 'cluster cups' on yellow spots on the leaves and stems (stage I) followed by minute, inconspicuous, dark brown 'sori', also on yellow spots (stage III). Stage II does not occur and stages I and III can be on the same or different plants. This rust may be found all year.

Mary Clarkson

From the moment of arriving in Cusco, our base, on Saturday April 16th, we were in Inca country. We reached the ancient city of Machu Picchu after four days trekking, camping at night, through exciting scenery — mountains with jagged ridges and snowy slopes, individual jungle-covered knolls, crags, gullies, sheer drops and jungle forest, with waterfalls tumbling over and over beside the path and below it. Suddenly this dream holiday, which had come to me purely by lucky chance through the thoughtfulness of my boss at work in Motherwell Public Library, was actually happening. He had made it all possible. Would I succeed in my sponsored quest for St. Andrew's Hospice in far-away Airdrie? Our Inca trail started at Km 82, crossing the grey tumultuous River Urubamba on a pedestrian suspension bridge. On the way from Cusco to Km 82 on the coach we had already caught early glimpses of the snow-capped high Andes peaks above the lower ranges, and the coach had stopped at a viewpoint to give us a foretaste of what we would be walking through. Here we actually had our first view of snow-capped Mt. Veronica; at 18,641 feet it is the 2nd highest peak in this part of the Andes.

For wildlife and the habitats in which it thrived, the trek was extremely spectacular. There was a great diversity of plant and animal life. Our trek led us through all sorts of habitats - riverside, bare mountain slopes, scrub growth, 2 types of forest - 'cloud' microclimate and jungle - grassland, cliffsides, small clearings and 3 upland lakes. The Cacti were magnificent and varied, as were the Aloes, Bromeliads, Tree Ferns and Palms. On one particular section the steep, high banks stretching away up into infinity were covered from top to bottom by mosses. What made them special were the brilliant, vivid colours of many hues which they exhibited and the sheer expanse of them. My conclusion on seeing such a profusion and the brilliant colours was that the atmosphere must be very clean. Brilliant as these were, the star attraction was undoubtedly a magnificent Orchid *Sobralia dichotoma* both in terms of size and colour, a most delicate bright pink with yellow centre. It formed a gorgeous picture, with the ruins of Machu Picchu behind it. Now, a moment of great excitement! Our sighting of a small American deer lying motionless under a small tree very near our path. We stayed rooted to the spot in fascination as we spotted another deer of the same species moving along the slope on the other side of the valley.

Stunned is the best word to describe my reaction to two sightings of the same species of Humming Bird. They were such bonny wee things, so delicate, with a glittering, showy blue plumage. They were there one minute and then, after a rapid fluttering, hovering in front of the tree, were gone in another minute. One of the magical moments of the walk was just after we cleared the microclimate forest and emerged into grazing grassland surrounded by the mountain slopes.



.....looking up at the night sky and seeing the constellations of stars twinkling brightly high above.

There we had a splendid sight of a large flock of green Parrots flying low above the ground. They were not near enough to distinguish their red heads, which we were told about. But I certainly saw the grass-green colour of the bodies. Hearing their calls, I now knew that a great deal of the birdsong that we had kept on hearing came from them. Now the frogs certainly made us aware of their existence. They were heard and not seen, and were making an amazing racket of sound. This continued through dusk into the hours of darkness. Finally there were the Butterflies that we saw of all colours - light yellow, strong yellow, lavender and brown-grey, reds with complicated markings (species unknown) flitting about constantly everywhere and so numerous as to indicate very high population levels.

Machu Picchu was our goal after our 3-day trek. We felt our arrival there was our big achievement, but before this was the test of the 3 mountain passes that we had to cross before reaching Machu Picchu. We knew when we appeared on top of the first one (on day 2) — Dead Woman's Pass (fortunately none of us died there and we didn't meet the dead woman or her ghost) - that we were going to make it to the end, with flying colours. This pass at 13,722 ft was the highest point of the trek and if any of us were going to feel the effects of high altitude sickness we would have started feeling it at approx. 13,000 feet (when we were trekking through the microclimate 'cloud' forest), but we all got there without anybody succumbing. The Inca ruins on the trail gave us a wonderful foretaste of what to expect

in Machu Picchu, and different sites showed us individual aspects of Inca civilisation. This sophisticated civilisation finally collapsed in 1570, after 40 years of resistance to the Spanish invaders. Every step was fascinating. There was a lot to take in, which could only be done in a leisurely fashion; one could not see everything. One just had to stand and admire the Inca engineering and the awesome stunning setting of the site, surrounded on all sides by the towering Andean peaks, and then feel struck by the dauntingly steep jungle-clad slopes descending with several sheer drops into the depths of the River Urubamba valley far below.

Our guide gave us a tour of many aspects of this city: 3 temples; the Royal Mausoleum underneath one of them; the residences and houses (both upper and lower class); the agricultural terraces; the granaries; the narrow water channels and the series of sacred water basins one above the other with fountains spouting water from the one above to the one below; the main square; the quarry area; the workplace area with its working floor; the astronomical sites. He showed us where the long-term restoration projects were taking place. We saw one house which had been completely rebuilt as it would have been in the ancient Inca days, with its heavily grass-thatched roof and the horizontal rounded timber poles, the ends of which stuck out by perhaps an inch or so at the gable ends. The stonework differences between the houses of the nobility and the ordinary poorer levels of the population were evident. In the houses of the former, the stonework was laid regularly in the most precise fashion with good sized rectangular stones, whilst the stones in the walls of the poorer quarter were roughly shaped and arranged against each other in a much rougher way. In the upper class house that we saw the doorways were of a beautiful trapezoid shape with a single massive lintel stone over the top. There were also fascinating carved stones with holes, some jutting out from above doorways and others on the walls, the former to do with a mechanism for a door to close the opening, the latter to do with holding flaming torches for lighting the area.

We also had time for our own individual explorations so I found myself in another temple - the temple of the Condor - where I stumbled quite unexpectedly upon the huge stone sculpture of the Condor. It was like finding the Holy Grail after a long quest. It felt to me like the core of Machu Picchu and was tremendously uplifting. It was a complete stone representation of the bird - body, neck sculptured horizontally on the ground with the two wings stretching vertically and tremendously high above and behind it. It was colossal. The Condor was part of the Incas belief system, representing the guardian of the heavens. Machu Picchu was a great climax to the trek and for me, my little corner of discovery in the temple of the Condor above a dizzy vertical drop was my personal climax, playing an important part in the even greater experience of Machu Picchu as a whole.

The whole trek was an unforgettable experience. There was the friendship and camaraderie among our group from Lanarkshire, and with the porters and guides; the mutual help and humour in meeting the challenges; and the sense of achievement in overcoming problems.

I treasure the memories of climbing up to 'Dead Woman's Pass', and the tremendous feeling of achievement we had; the special exciting entrance into Machu Picchu; at campsite 2, looking up at the night sky and seeing the constellations of stars twinkling brightly high above, amazingly clear; and from the same campsite, a most vivid display of lightning lighting up the distant sky brightly, impressive and enthralling.

For me the spectacular train ride along the valley floor of the River Urubamba, with the mountains towering high above us, was a special treat.

I remember too the jovial eating and drinking together on the trek, in the hotel in Cusco, and in restaurants in the city, climaxing in our celebratory dinner just before we left for Scotland. We all dressed up for the occasion, I in my full kilt outfit, plaid and all, at which we were entertained by native dancers. We had already been entertained by native musicians a few times.

Our moments of triumph at gaining the heights of Dead Woman's Pass and entering Machu Picchu are especially treasured by me in my memory and heart, and symbolise the spirit of the whole trek in a nutshell. Our guides and our companion trekkers encouraged and urged on those of us coming in at the rear, and when the rear elements arrived, everybody clapped each other on the back, and embraced and congratulated us, with handshakes all round. They were very beautiful and emotional moments.

We left Peru with a greater understanding of the Peruvian people, and respect for their way of life. We saw extremely prosperous districts contrasting sharply with much poorer ones where the buildings looked poorly built or even shanty like. Poverty was in evidence in several areas. Both in town and country we saw how they lived. Their dependence for their livelihood on tourism was borne sharply in upon us when in a city situation such as Cusco all members of the family down to infants had to bring in their bit for the family income, by selling beautiful well-made handicrafts on the street. In the country it was absolutely vital for the male members of the family to earn income through being porters, cooks, guides for us and other trekkers. Yet despite hardships they were the most pleasant, cheerful friendly people to know.

Finally, I raised £2,684 for the Hospice. The whole group raised £60,000.

Browsing round second-hand bookshops can sometimes be very rewarding. By doing so I have acquired several books long out of print, which are hard to come by. One of these is Tom Speedy's book entitled *Craigmillar and its environs*, published in 1892. Tom Speedy lived on the Inch estate and was known at the time to be a keen naturalist. He dedicated his book to Sir James Gardiner Baird who lived in Inch House. The word 'inch' signifies an island, and there was a time long past when the house was surrounded by water and access was over a drawbridge.

The first two chapters are devoted to the architecture and historical associations of the Castle. The Sycamore Tree gets full coverage: *This venerable Sycamore stands beside the hamlet of Little France. About a dozen years ago it showed certain indications of decay. In 1881 it had the upper branches sawn off. As the branches fell to the ground a large crop of seed was shaken offan abundant supply of young plants had grown from the seeds.....a number of seedlings were forwarded to Windsor and Balmoral.....one was planted beside the church at Ladykirk, and another by the walls of Linlithgow Palace.* The remains of this historic tree were preserved until quite recently.

In the time of James V the ground between Peffermill and Bridgend was known as the King's Meadows, and was a favourite hunting ground. It was in the centre of the Forest of Drumselch and largely forested. Within the forest were large herds of Red Deer, many of immense size. Evidence of Red Deer in the area comes from further passages in the book: *Towards the end of last century, in dredging Duddingston Loch, the antlers of deer were found. and When excavations were being made in 1887 for the Powburn Sewer on the road running eastwards from Cameron Toll...embedded in the moss was discovered a number of antlers of red deer in a wonderful state of preservation..*

Elsewhere in the book there is a further comment on Duddingston Loch: *It is to be regretted that in these days this beautiful show of water should be a receptacle for filthy sewage so that fish life, with the exception of pike, perch and eels, is thereby rendered impossible.*

In the chapter on the fauna there is much of interest: *Badgers are seen within a mile of the Castle, following the escape of a gravid female from the kennels at the Inch.* As Badgers were reputed to be extinct in the area at that time, one must presume that the Badger had been brought there from another part of the country.

Otters were seen regularly at Duddingston until the Braid Burn became heavily polluted: *A female otter and five cubs were seen (no date given) near Niddrie House. Servants gave chase and succeeded in killing three of the cubs.*

In 1805, 500 Weasels were collected throughout Scotland, some coming from the Craigmillar area, for transport to New Zealand, to check the increasing Rabbit population.

Rats are exceptionally numerous and are regarded as a modern plague. Water voles frequent brooks in large numbers. Field voles sometimes became so numerous that sheep had to be moved elsewhere because the grass was completely eaten up.

Blindworms and Slow Worms were in the area while *Lizards have been found doubled up in the gizzards of Magpies.*

The chapter on birds makes sad reading, as the interest was not in observing them, but in shooting them, even when they were rarities. So many birds are mentioned that only a few can be listed here:

Teal - sometimes shot on Duddingston Loch

Quail - occasionally seen

Water-ousel (Dipper?) - common

Redstart - has nested at Blackford

Barn Owl - frequent

Sand Martins abound

Nightjar seen at the Inch

Corncrake - common

Water Rail - frequently seen

Woodcock - a few shot every year

Tawny Owl - plentiful

Short-eared Owl - rare

Long-eared Owl - rare

Heron - frequent

Great Spotted Woodpecker - has been seen

Kingfisher - not uncommon

Snow Bunting - on Arthur's Seat in severe winters

Corn Bunting - frequent.



Have you seen a Quail at Craigmillar ??

The earliest list of plants in the area was made by Sir Robert Sibbald, one of the founders of Edinburgh's Botanic Garden, and many of the plants are from the Queen's Park. Speedy mentions French Sorrel growing on the Castle walls, and Sweet Cicely close by. Both may be dated back to the time when Mary, Queen of Scots was resident there, as both would have been used in the kitchens. Other culinary herbs mentioned are Alexanders and Good King Henry. Speedy comments on Common Wall Pellitory growing in the joints of old masonry, and Creeping Cinquefoil being in the area. The Evergreen Alkanet was near the Castle in 1799 but *is now become rather scarce.* Plants in the Queen's Park which are listed include German Catchfly, Rock-rose, Vernal Sandwort and the Forked Spleenwort. Bogbean is listed for Duddingston Loch along with Glaucous Stitchwort. The flowering Rush *Butomus umbellatus* *is now becoming very scarce.*

In a chapter headed *The Geological Features* Tom Speedy gives an excellent description of the geology

over a wide area including the Pentlands and the Midlothian Coalfields. Particular mention is made of Craigmillar Sandstone which is exceedingly hard and difficult to handle: *Several disused quarries around Craigmillar* are mentioned. One between the Castle and the new RIE has been infilled. One quarry north of the Castle now has houses on the site, while another is used for collecting refuse. It is worth mentioning that Hugh Millar worked in the area as a stonemason at Niddrie House.

The book was written over a hundred years ago and gives us a wonderful picture of the countryside which existed around Craigmillar before the City of Edinburgh expanded, with the loss of farmland and forest. Much of it is to be regretted, as we no longer have such a wide range of habitats. Gone are some of the landmarks - the Sycamore tree at Little France, the bleachfields at Peffermill and the forests where James V hunted. But there have been gains as well. The Braid Burn and Duddingston Loch are no longer contaminated with sewage; the rat population is under control; and birds of prey are not shot, so a plague of Field Voles eating all the grass is unlikely.

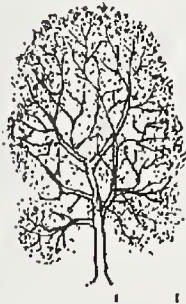
In another hundred years what will be the changes? More countryside will be lost, wet areas may be drained and climate change may phase out some species whilst some of a more southerly distribution may move north. One hopes that the reader will find our Journal fascinating reading with the detailed descriptions of outings and the pages of observations. Perhaps we can be the Tom Speedy of the future.



Short-eared Owl



..... and a Long-eared Owl



EDINBURGH'S TREES NEED YOU!

Since 2003 the City Council has run a Tree Warden Network with the aim of encouraging people to get involved with protecting, documenting and celebrating trees in their neighbourhood. At present there are 40 Tree Wardens, but many areas remain unrepresented and the Council is keen to expand the network.

Each year the Council provides a programme of talks and practical sessions to increase wardens' knowledge. Recent topics have included woodland management, tree surveys and production of interpretation material. The Tree Warden Scheme is promoted across the UK by the Tree Council, who produce a magazine specifically for Tree Wardens.

In Edinburgh Tree Wardens have been involved in a number of initiatives including:

- * Planting of trees at Cammo Estate
- * Development of a website
- * Tree labelling projects at Hopetoun Crescent Gardens and The Meadows
- * Survey and replanting of the grounds of Gracemount House
- * A photographic record of significant trees along the Water of Leith

For general information about what being a Tree Warden involves please consult the Edinburgh Tree Warden Network website or the Tree Council website. To discuss becoming a Tree Warden please contact the Natural Heritage Section of City Development on 469-3677



Dr Max Coleman, Trees and Woodlands Project Officer, Natural Heritage Section, City of Edinburgh Council.

I became so fascinated by Red Kites on the Nats Galloway holiday that I decided to find out more. Red Kites once used to be prevalent in Scotland, even extending their range into cities and towns to scavenge on food scraps, and capture small mammals which roamed the streets. In the 16th century the persecution against them started, and it escalated sharply under the Victorians, when they were almost driven to extinction. A small population of Kites hung on in mid Wales, their last refuge in the UK.

The Red Kite was first reintroduced into the wild in 1989, and the RSPB now believe that it is well established across the country. There were 76 pairs recorded in Scotland in 2005; probably the previous time this number was recorded would be in the 1800s.

On our visit to Doune this year the Ranger gave us a little bit of background about the Red Kite. It seems the behavioural habits of Red Kites led them into danger. Three factors led to their demise in the 19th century (1) the tremendous amount of noise they make, consisting of 3-5 whistle-like sounds in a row. (2) the enormous gatherings that assembled created a real cacophony, making them easy targets for human hunters. (3) they were not frightened of people, so never tried to make an escape. In the past there could be 500 birds at a winter gathering, compared with the much smaller number seen now. In the bad old days, in one year 105 Red Kites were killed.

At Doune the **tag marking system** used in all the Red Kite reintroduction areas was described to us: the left wing is fitted with a colour-coded tag to indicate the population area thus:

BLUE - Northern Scotland; RED - Central Scotland; GREEN - Dumfries and Galloway; YELLOW - Chilterns; WHITE - Midlands; ORANGE - Yorkshire; PINK - Northumberland; BLACK - Wales. The right wing is fitted with a colour-coded tag for the year; for example, YELLOW for 1996; PINK for 2000; ORANGE for 2005. A bar at the bottom of the tag shows the colour of the opposite wing tag. This enables the individual bird to be identified, and data to be compiled on age of first breeding, movement patterns, and composition of breeding pairs.

A most fascinating point we learned at Doune was that to prevent in-breeding, birds have been brought in from Spain, Sweden and Germany, to ensure a resilient population which should be strong enough over succeeding generations to survive.

With dedicated conservation programmes and help from rural communities, their population has risen again to almost 60 breeding pairs in Scotland. The success of projects in the Highlands (on the Black Isle,

and in Stirlingshire) has formed the foundation for a last steppingstone - Dumfries and Galloway - in the major conservation effort to reintroduce the Red Kite into Scottish rural areas after an absence of more than 100 years. They have also been reintroduced into Wales, Yorkshire, central England (Northamptonshire) and the Chilterns.

For the Stirlingshire Red Kite population, the RSPB is working with a local farmer at a feeding station at Doune, which the Nats visited on 3rd September.

DUMFRIES AND GALLOWAY

Restoring Red Kites as a breeding species in Dumfries and Galloway was begun in 2001. From 2001-2003, as the result of a partnership between the RSPB, Scottish Natural Heritage, Forest Enterprise, Dumfries and Galloway Raptor Study Group and local landowners, 90 were released to form a breeding population.

33 Red Kites were released in July and August 2003. 20 of these came from elsewhere in Scotland, and 13 from the Chilterns. Of these, 1 drifted and 4 were poisoned, 1 being recovered by a farmer in Ayrshire, the other 3 dying in an incident at the edge of the core area. Altogether 7 Galloway birds were found poisoned in 2003. 4 pairs laid eggs in 2003, with one rearing a chick, the project's first. In late October 2003 this chick was still alive, as were its parents, a German male and a North Scotland female. In the same month, 2 North Scotland birds arrived in the area, as well as an untagged bird. A young pair of 2002 birds was recently established. By the last quarter of 2003, 40-50 individuals were reported in the area.

Galloway Kite Trail

This was set up on 6th October 2003. Its purpose is to help the Red Kite population, nature-orientated tourism and the local communities around Loch Ken all at the same time, by linking together in an interactive way all the elements of the scheme. The intention is, to quote Kevin Duffy, RSPB Dumfries and Galloway Red Kite Project Officer: *to strengthen the ownership of the Kites by the local communities and tourist operators in a way which encourages them to take a vested interest in the success of the reintroduction project. In turn, we hope that this will help to foster the realisation that wildlife and the environment are important and valuable resources and should be cared for accordingly.* A feeding station has been set up at a farm near Laurieston village. Partners in the Kite Trail include the following local businesses: 5 hotels, 2 B&Bs, a guest house, a public house/restaurant, a holiday park, and a holiday chalet outlet.

THE FINAL PHASE - NORTH-EAST ENGLAND

Six birds were released into the skies above Gateshead on 12th July 2004 in the fourth and final phase of the English re-introduction project. This is the work of the Northern Kites Project led by English Nature and the RSPB in partnership with several other organisations. The aim is to reintroduce the birds into a semi-urban environment between the twin cities of Gateshead and Newcastle. - this is a new concept.

ABOUT THE BIRD

It has streaked whitish head, chestnut red body; striking white bands, broad at the rear, tapering to the front under the wing; broad white curving crescent across the inner part of the wing, black tips; elements of chestnut and dark grey under the wing.; a slender body and narrow wings, sharply bent forwards, backwards in flight. A deeply forked tail.

Nest of sticks and earth in trees, often on a old nest of a crow. Lays 2-3 eggs April - May. Incubation about 30 days, by female only. Nestlings tended by both parents leave after 50 - 55 days.

Food - small mammals, rabbits, sheep carrion, fledgling rooks and gulls, sometimes worms and frogs.

On our visit to Doune we observed the birds feeding. We learned that the Kite is a lightweight bird compared to the Buzzard and, for all its power, does not have enough strength to tear and rip open a carcass, whereas the Buzzard does.

The feeding order of the Red Kites and Buzzards was such that the first sign of activity in the skies was several Buzzards circling in the air, before landing and having the first go at the food which had been scattered by the Ranger. It was only after they had filled themselves and left, that the Red Kites, which had been perched patiently on perching posts and telegraph poles, came directly over the food. Thus by allowing the Buzzards to feed first, in nature's way, the carcass is made ready for the Red Kite. Red Kites eat on the wing.



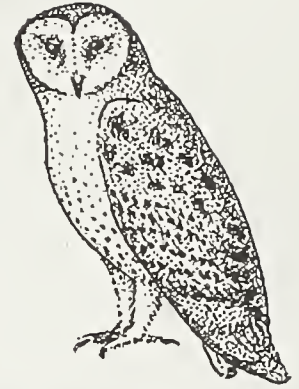
RED KITE POPULATION, by order of size.
Figures are for 2003 and are taken from the Red Kites web sites..

Area	Number of birds/pairs	Number of pairs laying eggs	Number of young fledged	Points of interest
Wales	350-400 Breeding pairs	147	273-312	Problems: The 2003 breeding season started badly after a record-breaking pre-season drought. There was some suggestion that this drought may have delayed the onset of egg laying, and that some pairs may not have laid at all. Although things were not quite as bad as they may have seemed, the glorious sunny weather did not produce a bumper number of young Kites,
Chilterns	177 Breeding pairs	163	312	They are slowly moving away from the core area of Oxfordshire/Buckinghamshire. There were a few nesting pairs in Wiltshire, Berkshire Downs, South Hampshire. <u>Threats</u> 2 birds poisoned. No nest robberies - a change from previous 3 years when there was at least one per year. The reintroduction programme has been continuing for the last 8 years. This population is going from strength to strength.
Yorkshire	100 birds	16	32	Release programme took place in 1999-2003. Yorkshire birds have ventured to Wiltshire, Bucks., Cornwall, Midlands, Wales
Northern Scotland (Black Isle)	35 pairs	33	71	Started at same time as Chiltern population, it is stuck at 2002 size. Drop in numbers of young fledged. Scottish birds used to reintroduce the species into Dumfries and Galloway came from here.
Northamptonshire	24	21	45	<u>Threats</u> : a small number of poisonings.
Central Scotland (Stirlingshire)	19 territorial pairs	14	34	Significant range expansion. Interchange between Northern and Central Scotland increased.

Web sites consulted and highly recommended:
www.welshkitetrust.org www.birdguides.com www.visitsouthernscotland.com www.scotlandthemovie.co.uk

A NATURALIST'S DIARY

Jeff Waddell



JANUARY

- 1st Great Spotted Woodpecker on the garden birdfeeder, Ladhope, Galashiels.
- 4th A Barn Owl roosting on a fence post at dawn, Colmslie, near Galashiels.
- 7th The appropriately named Early Moth netted after dark in a Blackthorn thicket, Newtown St Boswells Wood.
- 13th A few Juniper bushes found in the hills around St Marys Loch, Selkirkshire.
- 16th Barn Owl seen at dusk, Langshaw near Galashiels.
- 23rd Whooper Swans calling at dusk, Lindean Reservoir, near Selkirk.
- 27th Highlight of the month was four Snow Buntings feeding in peaty land-rover ruts, top of William Law, near Galashiels.

FEBRUARY (Moved to Nairn at the start of this month).

A Barn Owl - a number of sightings

- 20th Sanicle *Sanicula europaea* and Wood Fescue *Festuca altissima* in the gorge woodland, Cawdor Wood, East Inverness-shire.
- 21st A Stoat in ermine ran across the A96 in the evening rush hour (and survived!), east of Inverness.
- 26th A Raven calling above the craigs of Stac Pollaidh. Later an Otter was observed on the coast at Achnahaird Bay, West Ross.

MARCH

- 13th Creeping Lady's Tresses *Goodyera repens* found under the pines at Culbin Forest, Moray. Marsh Clubmoss was also seen here in the gravel pits – under a foot of water.
- 17th The first really mild night of the spring, toads emerged from hibernation in their thousands, and several Sword-grass moths were attracted to sugar at Culbin Forest.
- 28th One individual of the Red Data Book moth, Rannoch Sprawler was found after three of us searched hundreds of Birch trunks over a two-hour period in the woods at Kincaig near Aviemore. Rannoch Brindled Beauty moths were seen on fence posts nearby at Raliabeg.
- 30th Early Grey and Twin Spotted Quaker moths in light trap left at RSPB Wood of Cree nature reserve.

APRIL

- 2nd Two Common Lizards seen on the Scrape Burn, Peeblesshire. Higher up, on Pykestone Hill a Merlin was flushed from the heath; Arctic Hare and Golden Plover were also seen.
- 9th A Red Squirrel at Muirtown Wood, Culbin Forest.
- 19th Green Woodpecker heard at William Law near Galashiels.
- 23rd Four individuals of the Red Data Book Netted Mountain Moth seen flying over Bearberry heath, Duthil Burn, near Grantown-on-Spey.
- 25th A dried flower spike of Birds Nest Orchid found at Cawdor Wood, East Inverness-shire.
- 30th A few Green Hairstreak seen flying around Gorse bushes at the edge of a woodland clearing, Culbin Forest. Later that night a Kentish Glory moth was attracted to light.

MAY

- 5th Hundreds of flowers of Shepherd's Cress on a sandy track at Culbin Forest.
- 10th Peregrine seen at eyrie on sea cliffs, near Oban.
- 11th Tree Pipit on the bog at Belivat, near Nairn.
- 15th Barn Owl on a fence post at edge of minor road, Culbin Forest.
- 20th Scarce Prominent and Oak Nyctoline in the moth traps, Flora Wood, Selkirkshire.
- 21st A Barn Owl was seen diving onto a road verge, illuminated by streetlights, on the edge of Hawick in the small hours of the morning.
- 22nd A colony of Mountain Everlasting found on a grassy bank, Inner Grey Hill, near Hawick. Later at Groundistone Moss a Water Rail was heard.
- 24th Chequered Skipper Butterfly and the scarce Argent and Sable moth were seen at Allt Mhuic, Butterfly Conservation nature reserve, near Fort William; Pearl Bordered Fritillary also nearby at Clunes.
- 25th Pine Marten watched running along the roadside by day, Loch Lochy, Fort William.
- 28th The rare alpine plant, Diapensia was seen in flower in West Inverness-shire. Narrow-leaved Helleborine was visited afterwards in woodland near Loch Arkraig.
- 29th A Golden Eagle nest was visited near Fort William, chicks were present.

JUNE

- 1st Male Black Grouse seen by Loch Arklet, near Aberfoyle.
- 11th Red Kite flying over the road on the Black Isle.
- 12th An abundance of Small Blue and Dingy Skipper butterflies in the dunes at Culbin Sands.
- 16th Red-necked Footman moth found by day at Ae Forest.
- 18th Several Four Dotted Footman in a moth trap in the dunes at Buckie Loch, Culbin Forest. 114 flowering plants of One-flowered Wintergreen counted nearby.
- 20th Barn Owl hunting in the long grass by the runway whilst landing, Bristol Airport.



Water Rail

- 21st Abundant Wood White butterflies in the rides of Haugh Wood and flowering Yellow Bird's-nest in Lords Wood, Wye Valley.
- 25th Elongated Sedge in the floodplain woodland, RSPB Wood of Cree nature reserve.
- 26th Whorled Caraway found in a Purple Moor-grass pasture in the Cree Valley, and the following lepidoptera seen: Large Skipper, Small Pearl Bordered Fritillary, Silver Hook and the scarce Argent and Sable. Later on the coast at Gairheugh, Galloway, Northern Brown Argus butterflies were frequent whilst Oysterplant, Sea Radish and Sea Kale were growing on the shingle.

JULY

- 3rd An area of limestone grassland was visited in Allean Forest, Perthshire - Northern Brown Argus, Large Heath and Small Pearl Bordered Fritillary were recorded.
- 7th Wood Warbler calling on the banks of Loch Katrine, near Aberfoyle.
- 9th **National Moth night and day.**
A Visit was made to the Glen Affric area, East Inverness-shire. Here I recorded the Red Data Book Welsh Clearwing (possibly the first adult to be seen in this area) and the scarce Rannoch Looper & Argent and Sable. Traps were run in the dunes at Buckie Loch, Culbin Forest in the evening, where there was a bumper catch of sixty species, including the uncommon Plain Wave.
- 12th Two Grasshopper Warblers heard on the Skyre Burn, near Dumfries.
- 15th I helped ring some Osprey chicks near Fort William.
- 16th Two Clouded Magpies caught in the moth trap and a new colony of Northern Brown Argus Butterflies found, Craik Forest, near Hawick.
- 17th Several Juniper bushes and a single Scarce Silver-Y moth on the heathland at Middle Bar Knowe, near Walkerburn.
- 23rd Single Dotted Wave in a moth trap, Makerstoun, near Kelso.
- 25th Bog Rosemary frequent on the raised bog at Kirkconnel Flow, near Dumfries.
- 27th Parsley Water Dropwort and Sea Lavender in flower on the saltmarsh at Rascarrel, near Dumfries.
- 28th The moth trap was set whilst staying at Achmelvich Youth Hostel, West Ross: Pretty Pinion, Archers Dart and Dotted Carpet were amongst the moths caught.
Mossy Cyphel and Dark Red Helleborine seen high on the limestone crags at Inchnadamph.
- 29th Another day at Inchnadamph found Don's-twitch grass and Variegated Horsetail.
- 30th Hundreds of plants of Norwegian Mugwort were seen on a mountain top in Wester Ross, several flowering.
- 31st Scottish Primrose and Hoary Whitlowgrass were visited on the headlands at An Fharaid, near Durness.

AUGUST

- 1st The dunes at Invernaver near Bettyhill were explored. Yellow Ringed Carpet and Manchester Treble Bar were caught. We were lucky enough to see one or two of the thousands of plants of Purple Oxytropis still in flower.
- 3rd Four Ospreys watched hunting over Findhorn Bay, whilst Grey Seals bobbed about in the water.
- 9th A Hen Harrier seen flying low over heathland in Angus.
- 13th The unusual moth, Pinion Streaked Snout, was caught in a trap at Buckie Loch, Culbin Forest.
- 27th A visit to the Glen Clova area late in the year to see some alpine plants. The highlights were Yellow Oxytropis, Alpine Catchfly and Interrupted Clubmoss.
- 29th An amazing congregation of more than forty Arctic Hares on the sheltered, leeward side of Glas Maol, Angus. Lower down on the crags Alpine Woodsia and Alpine Cat's-tail were seen.

SEPTEMBER

- 3rd Plain Clay and Blue Bordered Carpet moths were caught at Newtown St Boswells Wood.
- 14th Swathes of Corn Marigold were seen in the arable field margins near Nairn.
- 25th Red Squirrel on a Hazel bush at Drynachan Lodge, near Nairn.

OCTOBER

- 14th A new colony of One-flowered Wintergreen was found in an unusual habitat out in the open on the dunes at Culbin. It was growing with Marram Grass, Serrated Wintergreen and Common Wintergreen. Gypsywort was found in an area of Fen at Buckie Loch, the only recent record of this plant, which is rare in the area, from the Moray side of Culbin.
Some late butterflies were seen on the dunes: Red Admiral, Small Tortoiseshell and Peacock.



Golden Eagle at Fort William in May



Hen Harrier in Angus in August

As will be seen below, this has been another poor year for seabirds in the Firth of Forth. However, looking at Scotland as a whole, this has generally been a slightly better year for seabirds than 2004. It is thought that the main reason was a general scarcity of sandeels in 2004, particularly in the North Sea. It is assumed that the knock-on effect for 2005 was that there was a shortage of larger sandeels and therefore many adult seabirds would not have reached breeding condition.

Although there has not been a full count of breeding puffins in recent years, it is known that they are doing particularly badly on Craigleith with numbers down to about half of what they were a few years ago. This is largely due to the prolific spread of Tree Mallow *Lavatera arborea*. (See the article on Page 24)

Fulmar: A total of 1,189 apparently occupied sites were counted, down by 175 on last year. There are now only 58% of the sites that there were in 1997. The biggest losses were on Craigleith, Fidra and Inchcolm while Bass Rock increased slightly. Inchmickery increased by 71% to 41, and May Isle by 40 sites to 276.

Cormorant: These are down by 97 (24%) leaving 303 nests counted. This is well down on the 1991 high of 511 nests. It is interesting to note that the birds which nested on Carr Craig last-year moved to Haystack this year.

Shag: This species showed a dramatic drop in numbers: down 51% on last year's count, to 825 nests. The biggest losses were on May Isle with 406 fewer nests (59%) and Craigleith down by 311 nests (60%). However numbers on Inchkeith increased by 8 nests, to 161.

Eider: The biggest colony is on May Isle where numbers fell again this year, by 31 nests to 1,070. Not all islands were counted but where they were, numbers increased only on Fidra (by 9 nests) and Inchgarvie (by 1).

Gulls: The **Great Black-backed Gull** has increased by 8 nests from last year giving a total of 46 nests.

The **Lesser Black-backed Gull** showed an increase of 102 nests giving a total of 1,583. This increase is mainly on May Isle (up by 99) and Fidra (up by 41). However numbers on Inchmickery fell by 25, to 109 nests.

Although **Herring Gull** showed slight increases on some islands, the total number of nests counted is down on last year. The biggest numerical losses are on Fidra (down 78 nests, 7%) and May Isle (down 334 nests or 13%).



Kittiwake: This is another species where the total number of nests is down, by 4% to 5,591 nests. The biggest numerical losses were on Bass Rock (down 97 nests, 14%), May Isle (down by 86 nests, 2%), Lamb (down 32 nests, 25%) and Inchkeith (down 29 nests, 8%). In contrast to these Fidra increased by 40 nests (18%)

Terns: Common Tern numbers are down from 238 nests last year to 195 this year. The drop is mainly due to lower numbers on Long Craig though there were modest increases on Forth Rail Bridge and May Isle. On Long Craig there were at least 120 nests although there were no more than 160 adult birds counted. From these nests at least 140 young were produced.

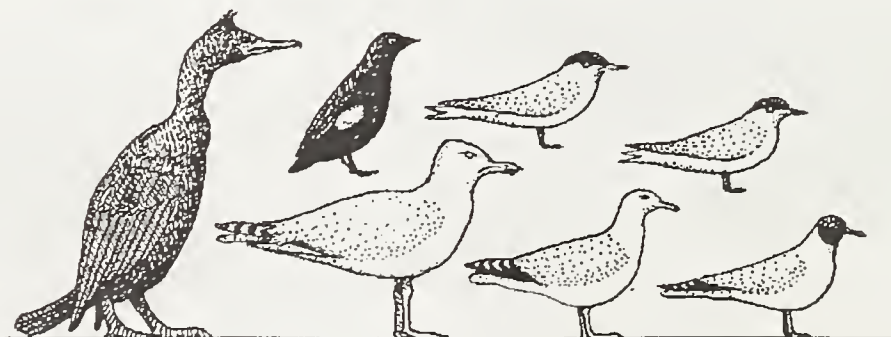
The only island where **Arctic Tern** nested is May Isle and here numbers fell from 666 nests last year to 609 this year. This is a drop of 8.5%.

This year four pairs of **Roseate Tern** were nesting in the Forth area. This is the same number as were counted last year and at least four young fledged - one from each nest. The maximum number of adults counted was eight.

Once again **Sandwich Tern** only nested on May Isle and their dramatic decline continued, with only three pairs nesting. This compares to 151 nests last year and 500 nests in 2001. There were up to eight adult birds present on Long Craig and one chick was fledged from the three nests that were constructed.

Razorbill: In contrast to most of the preceding species, the number of Razorbill showed an increase of 60%, giving a count of 5,238 pairs/sites. This changes the downward trend of the last three years.

Guillemot: This year's count of 28277 birds is down by 4% compared with last year. Numbers are down on all islands except Fidra where they increased by 135 birds or 24%.



SUMMARY of SEA BIRD COUNTS for the FORTH ISLANDS 2005

	Bass	C'Leith	Lamb	Fidra	Eye br'ty	Inch keith	Carr Craig	Inch colm	Haystk	Inch Micke	Ig/Frb	Long Craig	May	Total
Fulmar (AOS)	45	62	4	127	0	302	0	131	0	41	201	0	276	1189
Cormorant (nests)	0	112+	55	0	0	85	0	0	51	0	0	0	0	303
Shag (nests)	18	131	49	115	0	161	11	4	3	52	0	0	281	825
Gannet (nests)	x	0	0	0	0	0	0	0	0	0	0	0	0	x
Eider (nests)	x	x	0	78	0	x	1	x	0	130	63	3	1070	1345
Great B-b Gull (nests)	?	6	0	2 birds	0	3	1?	1	0	1	1	0	32	46
Lesser B-b Gull (nests)	x	x	0	131	0	x	cl-2	x	2	109	19	0	1320	1583
Herring Gull (nests)	x	x	27	957	1	x	38	x	8	319	180	0	2094	3624
Kittiwake (nests)	563	492	94	257	0	329	0	66	0	0	0	0	3790	5591
Common Tern (nests)	0	0	0	0	0	0	0	0	0	0	10	120	65	195
Arctic Tern (nests)	0	0	0	0	0	0	0	0	0	0	0	0	609	609
Roseate Tern (nests)														4
Sandwich Tern (nests)	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Razorbill(pairs/sites)	198	132	73	69	0	49	0	4	0	0	0	0	4713	5238
Guillemot	1860	1452	1578	701	0	19	0	0	0	0	0	0	22667	28277
Puffin (as stated)	10 ind on land	x	x	x	0	548 ind most on sea	0	2 on land 2 on sea	0	4 ind ashore 26 at sea	0	0	x	>592 inds
Ig/Frb=Inchgarvie and Forth Rail Bridge x=present but not counted; 0=none breeding; AOS=apparently occupied sites														

The above is summarised from the annual report produced by the Forth Seabird Group, to whom thanks are due for allowing its use here. Bill Bruce

ATLANTIC GREY SEALS

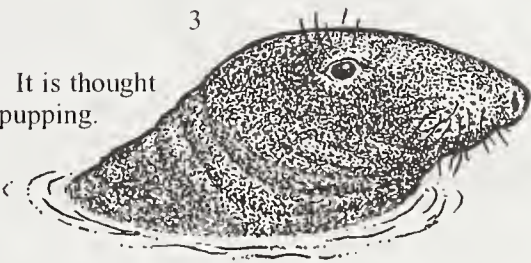
In November, the mother Grey Seals come ashore to have their pups. These are born with a creamy white fur coat and stay ashore for a few weeks suckling their mother’s rich milk. They then shed their baby coat to reveal a spotted grey one. After about four or five weeks they will leave the beaches and go to sea.

Their main island in the Firth of Forth is the Isle of May, where up to 2000 pups are born each year. In the last few years we have started making trips out to the other islands to count the number of Atlantic Grey Seals which have come ashore. This year’s figures are listed here:

	Bulls	Cows	Pups live	Pups dead
Inchkeith	7	57	66	1
Inchmickery	1	5	0	0
Carr Craig	0	1	3	0
Inchcolm	1	7	6	1
Haystack	0	0	0	0
The Lamb	0	0	0	0
Fidra	0	0	0	0
Eyebroughty	1	0	?	0
Craigleith	>3	38	30	3

Bass Rock was checked in 2004 and three pups and three cows were seen. It is thought that the caves and tunnel through the Rock are used by the Grey Seals for pupping. This obviously makes an accurate count difficult here.

The above too is summarised from the annual report produced by the Forth Seabird Group, to whom thanks are due for allowing its use here. Bill Bruce



'BASS' MALLOW on CRAIGLEITH

In the UK, Tree Mallow *Lavatera arborea* which is native to the south and west coasts of England and Wales was probably introduced by the lighthouse men on the Bass Rock, to plant in their garden. It spread and spread, and became known as the Bass Mallow. Now it has spread to the other islands in the Forth, particularly to Craigleith.

Tree Mallow is a biennial, with a thick woody stem, big woolly leaves and attractive deep pink flowers which have dark purple veins. It can grow up to three metres tall. This plant now covers practically all areas of this island where there is any soil. The forest of stems is so dense that the Puffins find it impossible to get to a suitable place to dig the burrows they require for nesting. Thus the numbers of Puffins on this island have fallen.

In an attempt to reverse the Puffin situation on Craigleith, the Centre for Ecology and Hydrology are investigating how to try to control Tree Mallow without causing other problems, such as erosion. During 2005 they established a number of trial plots where they cut down and removed all growing stems of Tree Mallow. By the autumn these plots were thickly covered with new seedlings. There was a report in the press recently that the scientists are considering the introduction of neutered Rabbits to the breeding sites; the Rabbits would rip up the plants' shoots before they could take proper root. This is obviously a long term project.

Maggie Sheddan, a Scottish Seabird Centre volunteer, has been involved in the project, and reports as follows:

I joined two researchers from the Centre for Ecology and Hydrology and we landed on Craigleith. There has been some ongoing research on the north side of the island. Bass Mallow dies off after a couple of years, but in that time it will have dropped many seeds. When it dies down, or if large areas are cleared, more light reaches the ground, allowing the seed to sprout. The seed likes bare soil and in many ways the Puffin has created the ideal habitats for regeneration of the plant. The Puffin digs out its burrow, creating a fertile layer of topsoil, and the seed already in the ground germinates. After the Puffins leave, the ground is virtually undisturbed. That, along with a series of mild winters, has helped to create the dense plantation we see from the SSC Viewing Deck. I was quite shocked. I landed there two years ago and you were able to walk through it. Now it is so tightly packed, you can struggle to walk through it, and at times, particularly on the south side, it was completely over my head. It would appear that there is no easy solution. Where the CEH have cleared small patches close to grass, the grass has spread, and Mallow growth is minimal.

Compiled from reports by Bill Bruce and Mary Tebble



BUTTERFLIES IN THE LOTHIANS - RECENT ARRIVALS

Richard Buckland

Record average global temperatures over the last 5 years or so have confirmed that the planet is getting warmer, although its causes are still a matter of debate in some quarters. In order to see how Butterfly populations have reacted to this change, Butterfly Conservation (BC) and its partners in Europe decided to analyse survey data from the whole of the last century, from across the whole of Europe. It showed that the ranges of most Butterfly species in Europe for which there are suitable records, are moving northwards, and that this movement is highly correlated with the increase in temperature.

In Scotland for example, species such as Peacock and Orange Tip are becoming a lot more widespread. Another species that has taken advantage of climate warming to increase its range is the Comma.

Studies by Butterfly Conservation and the Centre for Ecology and Hydrology have indicated that parts of eastern Scotland have become potential habitat for species of Butterfly, currently confined to England, to establish themselves in Scotland, in particular in the basins of the Forth and Moray Firths. However, habitat fragmentation and lack of mobility of certain species has meant that few species have been able to take advantage of this opportunity. But the Comma is highly mobile, and there have been increasing numbers seen in Scotland as they expand their range north from England. In the Lothians and Borders, we are in the best position to monitor this increase. The first record of the Comma in Scotland since the 1800s was in 1996, just over the border at Chesters, south of Jedburgh. They have been recorded in ones and twos most years since then, until in 2004 a grand total of 35 were recorded in the Borders. In the same time, the Lothians were recording 17. Significantly, however, very few of these were recorded in spring, which might have indicated that the individuals had over-wintered in Scotland, and had truly re-colonised the country. Most of these records are from late summer, which are probably of individuals that have migrated up from England or perhaps have hatched from eggs originally laid in Scotland in spring. Of the 70 records from the Lothians and Borders since 1996, only 6 have been of individuals recorded in spring or early summer.

Another species that has arrived in Edinburgh recently is the Northern Brown Argus. But the circumstances are a bit different! In fact, global warming might act in the opposite way for the distribution of this species, as it is acclimatised to cool weather conditions. Hence it is mostly confined to Scotland in the British Isles. Its close cousin the Brown Argus is acclimatised to warmer weather, and is found in England. The Northern Brown Argus was known in the Lothians in the 1800s, most famously from Holyrood Park in Edinburgh. It was last recorded here in the 1860s, and so it was with considerable shock that BC member Ian Christie identified one, on his daily stroll in the Park.

Its re-appearance is quite ironic, as Scottish Natural Heritage had suggested a re-introduction of this, essentially Scottish Butterfly to the Park, as a high profile Millennium project. BC, however, argued against the idea, as no one could be sure why it had died out in the first place. This is essential so that the site can be prepared correctly, and time, effort – and Butterflies (!) – are not wasted. However, SNH still went ahead with the improvement of the growing conditions for the larval foodplant (Rock-rose *Helianthemum*) and it has paid off handsomely, as it appears that a small colony has established itself in the Park. The 64,000 dollar question is how they managed to get back. This colony was always fairly isolated, with the nearest colonies currently being on Soutra to the south, and in Fife to the north. So, unlikely though it may seem, the most probable method of re-colonisation seems to be that a gravid female was blown over the Forth on a northerly breeze one sunny July day, or else someone surreptitiously released a few adults a couple of summers ago.

Another species on the increase in the Pentlands is the Green Hairstreak. This, however, is due to straightforward human interference, i.e., positive conservation measures. The foodplant of Green Hairstreak caterpillars is Blaeberry throughout most of Scotland, and there is quite a lot of this in the Pentland Hills. So it was thought that the butterfly might be here. And a few years ago, through careful survey work, the Pentland Park rangers identified a couple of colonies in the Park. In BC we argued that there weren't more because the sheep were eating all the Blaeberry, and so we decided to approach the landowner (the MoD) and asked if we could erect a couple of enclosures around some patches of Blaeberry, in order to protect them from the sheep and to improve their condition.

Green Hairstreak was on the local BAP of Midlothian Council, under whose auspices this land falls, and they were good enough to help the project financially. BC would also like to thank the recycling concern WREN for financial help, and the MoD for their helpful interest. One of the enclosures is adjacent to the Castlelaw firing range, which means that care must be taken to check whether firing is due to take place when visiting the site; and the other is on the east bank of the Kirk Burn, which flows into Glencorse Reservoir at the elbow, and is just off the footpath from Castlelaw to Swanston. Last year Victor Partridge of the Pentland Rangers counted 8 adults in or around the Kirk Burn enclosure, and 36 at the Castlelaw site. Which is a result in anyone's language.

They are on the wing in mid to late May.



Comma

..... AND MORE ABOUT THE NORTHERN BROWN ARGUS IN HOLYROOD PARK

Natalie Taylor

Various reports were heard last winter of a Northern Brown Argus Butterfly being seen in Holyrood Park during the summer of 2004. So it is easy to imagine how eagerly I awaited the beginning of the 2005 season; had this just been one solitary, lost individual, or were we about to enter a new and important phase in the history of the Butterfly and the biodiversity of the Park?

The Northern Brown Argus is a small Butterfly, similar in size to the Common Blue and has similar underwing markings. At first sight the upperside of its wings appear simply brown with orange and white 'edging' and two distinctive white wing spots; however when the wings catch the light they take on the most amazing almost royal blue sheen.

Holyrood Park was once one of the primary sites, indeed the only known site in the 18th century, for the Northern Brown Argus Butterfly, until over-collecting and habitat loss caused it to become extinct there in 1869. Over the past few years the Historic Scotland Ranger Service (HSRS) have been working hard to improve the habitat in the Park for this smart little Butterfly. The favoured food plant for the species, Rock-rose, has been surveyed and monitored, and active management has been undertaken to increase its area.

Much to my disappointment, I was not lucky enough to be the first to find the Northern Brown Argus at Holyrood this summer – typically, I was with the Nats on Mull when one of the HSRS volunteers first spotted an individual feeding along one of the rough verges! This initial sighting was followed by many more throughout the summer, at a number of locations in the Park.

So, the question is how did they get here? Are we seeing a natural recolonisation following the habitat work, or has the species been artificially introduced? Whatever the answer, it is great to see them back in Holyrood Park, and to have the management work fulfil its purpose of providing sustainable conditions for this charming Butterfly.

PEACOCK BUTTERFLIES IN THE HOUSE

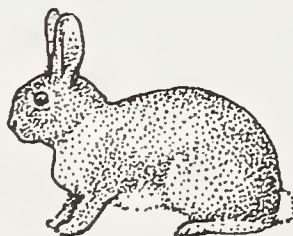
Elizabeth Farquharson

This winter I have had the company of 7 Peacock Butterflies. They arrived in the house in early winter. One presumes that there are others hidden in obscure places, perhaps behind shutters or in rarely-used cupboards, but so far I have not found them.

The first to settle for the winter attached itself to the inside of the front door and has never moved for three months. It must be both draughty and chilly, but perhaps that is what it likes. The repeated movement of the door does not seem to be a problem.

Two more chose the sittingroom. For about three weeks they were very lively, spending much of the day near the window but in the evening wandering round the room, usually on the floor. This was a slight problem first thing in the morning as I had to locate their whereabouts before I could move freely round the room. Early in November one was found dead but the other one remained as lively as ever, sometimes settling on my shoe or trousers, and showing no signs of alarm when I moved around. When we had a council meeting of the Nats in the sittingroom on 30th November it nearly met its death on the floor and then disrupted proceedings by flying around the room. Eventually it was persuaded to return to the window. It was into the New Year before it finally disappeared and hopefully it has found a safe roost.

Two more took over the kitchen and unfortunately preferred the floor and would not stay still. Great fun trying to cook, stepping over wandering butterflies. One was found dead in mid-December. Finally, in the week before Christmas with a full house and considerable activity in the kitchen, the other, after it had had several brushes with death, was carefully picked up and put in the coal cellar for its own safety.



....the neutered Rabbit on Craighleith??

The first stage of EBAP (1999-2004) was focused on the 97 species which had been selected for detailed study, and on 12 types of habitat. Actions for the conservation of biodiversity were proposed and implemented for these species and habitats. Reports and records were fed back by each of the organisations involved. Records were sent to Lothian Wildlife Conservation Centre and then submitted to the UK Biodiversity Action Plan.

The outcomes of Stage-1 of the plan have now been assessed and discussed in sub-groups. The main involvement of ENHS (apart from representation at the meetings of the main Steering Group and at the Woodland sub-group) has been the response by a few members of the Society to requests to survey sites or to provide historical records.

Based on the experience of the earlier plan it was decided that Stage-2 should concentrate on habitats while retaining a few plans for individual species. The update was launched on November 17, 2004 at the Historic Scotland Ranger Service Education Centre in Holyrood Park. The presence of the City of Edinburgh Council Leader was indicative of the increasing interest being taken in matters of biodiversity.

Some local schoolchildren were present and short speeches were given by Council officials, and by Robin Harper (MSP) and Lesley Watson of BBC TV's *Beechgrove Garden* programme. Lesley emphasised the responsibility which an ordinary gardener has for local biodiversity, and highlighted the value of selecting flowers which carry simple (rather than double) flowers, to provide sources of food for birds and insects. Robin Harper followed up his visit by tabling a Motion in the Scottish Parliament congratulating all the partners on the Plan.

It is hoped that many members of the Society will continue their interest in this important venture. It appears that the main contribution which the Society can make is to welcome new members and interested people to its meetings and walks, and to foster an interest in every aspect of our natural environment. Another important role can be to identify and draw attention to small areas of good wildlife habitat which may be under threat from potentially harmful development.

The new section has been added to the copy of the Biodiversity Plan in the Society library, and the whole Plan can be made available for consultation at our monthly meetings.

BENTHAMIDIA (formerly CORNUS) KOUSA JAPANESE DOGWOOD

Japanese Dogwood grows to a height of 15-20 feet and has beautiful, exfoliating bark. The leaves are green in summer, and purple to red in autumn. It received its name from the Japanese island of Kyushu, where it was first discovered.

On our outing to Bara farm, George took us into the garden of the farmhouse to see the tree, *Benthamidia kousa*. It was a glorious sight, with a fall of what appeared to be blossom, large pink and white 'flowers' tumbling down the tree, almost concealing the leaves. These 'flowers' are formed by four showy bracts arranged in a cross. The real flowers, small and greeny-white, grow in a cluster at the centre of the four bracts. In autumn a cluster of red, juicy fruits resembling a raspberry is formed. Birds quickly devour these fruits.



Margaret White

Reproduced by kind permission of Royal Botanic Garden Edinburgh

The Scottish Seabird Centre now has 5000 members, has contributed £5,000,000 to the local economy and has 50 volunteers who help with all aspects of the Centre. It has reinstated North Berwick as a popular tourist resort and is recognised as one of the best Millennium projects. It has welcomed its millionth visitor.

In May 2005 the Centre celebrated its 5th Birthday. This was an appropriate time to build on its success by launching the new Environmental Discovery Centre. This focuses on climate change as the most critical issue of our time and explores the related themes of renewable energy, recycling and energy conservation. A key objective is to encourage people to adopt environmentally-friendly measures at home, work and school, with the message that if we all do a little we can change a lot.

The Environmental Discovery Centre is linked directly to the rest of the Centre by an underground tunnel, known as the 'Flyway'. The new Centre explores the impact of man's actions on the planet and makes a direct connection between the local wildlife, which visitors can observe at the Seabird Centre, and key issues such as climate change.

The Flyway is where visitors experience the sights and sounds of the incredible journeys involved in animal migration. From a bird's perspective, North Berwick is a busy international airport, with flights coming and going from all over the world. 45% of Europe's nesting seabirds make their homes in Scotland.

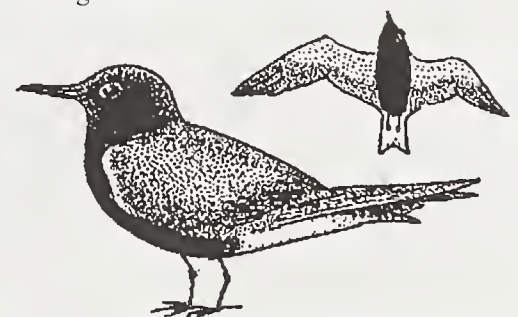
Seabird colonies here have suffered one of their worst breeding seasons on record.

WEEKLY SIGHTINGS FROM THE SCOTTISH SEABIRD CENTRE AND NEARBY

Mary Tebble

- 6/1 150-200 Shags in water off Craigleith. Stonechat, East Beach, North Berwick. Shore Lark at Tynninghame; Black Redstart juv.fm. seen regularly until week ending 10/3, close to yachting pond. 6 Grey Seals on Craigleith, 30 Tree Sparrow at Fenton; 2 Waxwings at Fenton Barns.
- 13/1 Shore Lark, Snow Bunting, Twite and Greenshank at Tynninghame. Short-eared Owl, Slavonian Grebe, Black-throated Diver at Musselburgh; 2 Greylags on Fidra; 3 Waxwings in local garden for 2 days.
- 20/1 5 Purple Sandpiper roosting behind sea wall. A Redwing near Blenheim Hotel. Buzzard in Dirleton Avenue garden. 1 Greylag on Elcho Green, NB. Jack Snipe, Snipe, Shore Lark at Aberlady Bay. First Gannet near Bass Rock (16/1). Fulmars on cliffs between Canty Bay and Seacliff.
- 21/1 Fulmars gliding around Fidra and Craigleith cliffs. Peregrines on Bass Rock and Fidra. Greylags on Fidra. Many Gannets flying over the sea. Pair of Stonechats on East Beach.
- 3/2 23 Purple Sandpipers counted, NB. Treecreeper seen in Law Road (until 10th). Surf Scoter and Kingfisher at Musselburgh. Shore Lark, Twite and Snow Bunting seen, John Muir Country Park.
- 10/2 1st Gannet seen landing on Bass Rock (11/2). Sanderling in West Bay.
- 17/2 Kittiwakes seen out at sea. 4 Gannets sitting on Bass Rock.
- 24/2 5 Goldeneye, West Bay. 1 Cormorant with white breeding patch, on Isle of May. Lesser Celandine, Primroses, Daffodils, Snowdrops and Coltsfoot in flower.
- 3/3 Kittiwakes on Craigleith Cliffs. 1000s of Gannets on Bass, 2 Shore Larks, 2 Red-necked Grebes at Aberlady. Brambling and Greenshank at Tynninghame. Nuthatch seen and heard at Smeaton Gardens. Many dead Guillemots, Razorbills and the occasional Puffin and Little Auk washed ashore between Gullane and NB.
- 10/3 5 Little Auks swimming at Kilspindie, Aberlady. 1 Long-tailed Duck in East Bay and a Merganser on yachting pond. 5 Roe Deer seen at Aberlady.
- 17/3 16 Purple Sandpipers behind sea wall - seen from SSC. Shags with crests near The Lamb. Peregrines seen mating on Fidra. Grey Wagtail at far end of East Beach. First Kittiwakes seen nesting at Dunbar harbour. Waxwings at Longniddry/Tranent road junction. Mute Swans mating near Balgonie. Snow Bunting, Jack Snipe, immature female Merlin and 3 Barnacle Geese at Aberlady.
- 23/3 First Sand Martins.
- 31/3 2 Ravens on Bass Rock. Common Scoter on sea nearby. Shags, Cormorants, Razorbills, Guillemots and Puffins, early morning, on most of the islands. Sandwich Tern at Seton Sands; Swallows at mouth of Esk, Musselburgh; Wheatear at Torness; 100 Waxwings at Tranent A1 junction.
- 7/4 Chiffchaff heard and Yellow Figwort in flower at Tynninghame. 2 Sandwich Terns diving in East Bay.
- 1/4 Great Grey Shrike at Barn's Ness.
- 3/4 Nuthatch in Grange Road. On Isle of May - Dozens of Puffins, 1700 Guillemots, 400 Razorbills counted close to Pilgrims Haven. Being ringed: Fieldfare, Redwing, Woodcock, Sparrowhawk, Chiffchaff and Great Tit. 48 Grey Seals seen.
- 14/4 Bass Rock gleaming white with Gannets in the sunshine, with surrounding airspace busy with flying birds. Territorial fights between immature Gannets, fierce and long.

- 21/4 East Linton to Hailes Castle: Kingfisher, 4 Dippers, 3 Grey Wagtails and Cormorant. Chiffchaff and Blackcap singing. Sweet Cicely, Wood Stitchwort, Dusky Cranesbill, Ransoms and Purple Toothwort in flower. Willow Warbler and Grasshopper Warbler heard at Gullane Bents. At Aberlady, a Whimbrel, 27 Snipe and a Mandarin Duck. (14/4)
- 28/4 10 Wheatears and a Great Skua at Aberlady. Rue-leaved Saxifrage in flower there. First Orange Tip Butterfly seen (first ever on the Reserve). Great concern about the huge increase of Tree Mallow on Craigleith, blocking entrances to Puffin burrows.
- 5/5 Wheatears on Isle of May. Whinchat, Wheatear and Whitethroat at Musselburgh, with Shoveler, Greenshank and Common Tern. First two Gannets' eggs on Bass. At Aberlady a good week for migrants, with Little Stint, Curlew Sandpiper, Common Sandpiper, Black-tailed Godwit, Greenshank, Sanderling, Manx Shearwater, Tree Pipit, Redstart, Whinchat, Stonechat, 65+ Wheatear, Grasshopper Warbler, Lesser Whitethroat, Jay and Short-eared Owl all seen !
- 12/5 21 Purple Sandpipers on seaweed, East Bay. Spotted Flycatcher in local garden. Blackcap singing in centre of NB. Shags nesting on islands. At Tynninghame, 2 Little Terns, 4 Greenshank and a Pintail.
- 19/5 On Isle of May: Puffins, Shags, Guillemots and Razorbills all on eggs. Arctic and Common Terns have returned. On Bass Rock: a Herring Gull flew over with a Gannet's egg in its bill. On Craigleith, 2 Eider ducklings hidden among the Tree Mallow. A pair of Peregrines on cliff edge. East of Gullane Bay: 40 Sandwich Terns, 9 Sanderling (some in summer plumage). At Yellowcraig, a Lesser Whitethroat heard. At Aberlady, Spotted Flycatcher and Wood Warbler.
- 26/5 On Craigleith: Herring Gull chicks began to hatch. Musselburgh: Goosander with young Whimbrel, Little Stint, Surf Scoter and Garganey. At Port Seton, an Osprey flew over. At Tynninghame: 2 Ospreys seen, Arctic Tern and Whimbrel. A juvenile Tawny Owl near new SOC HQ. A Quail was heard at Aberlady and a Snow Bunting spotted at Barns Ness.
- 2/6 Many Eider ducklings along the coast. Eider on eggs on Isle of May. Porpoise near Bass. Little Gull, Lesser White-fronted Goose and Goosander with young, Musselburgh. 45 Canada Geese, 1 Light-bellied Brent Goose, Shelduck with young, Aberlady. 3 Peregrine chicks on Power Station roof, Torness.
- 9/6 Isle of May: 1 Shag with 2 chicks. Action Plan made for clearing Craigleith Bass Mallow.
- 11/6 First Gannet chick spotted (9/6) at approximately 10 days old. 2 young Peregrines on Craigleith.
- 16/6 The 2 Peregrine chicks taking short flights. Isle of May Puffins carrying Sandeels to their burrows. Arctic Tern colony increasing. Not many Sandwich Terns. At East Linton, Dipper chicks have fledged. Otter spotted near Knowes Farm.
- 23/6 25 Eider ducklings near SSC. Isle of May - first Shag and first Guillemot chicks. Puffins with bills full of Sandeels. Bass Rock: Common Seal with pup; they can give birth and be back in the sea by next tide. Craigleith: Peregrines seen daily. Aberlady: Marsh Harrier mobbed by Lapwings. Osprey seen. Musselburgh: Curlew Sandpiper, Green Sandpiper, Little Gull and Grasshopper Warbler. Gosford Bay: 2 Red-necked Grebes.
- 30/6 Eyebroughty - Many male Eiders in partial eclipse. The Lamb: 2 Bottle-nosed Dolphins nearby. Bass Rock: 3 Common Seals with Greys in water.
- 8/7 Fidra - first Kittiwake chicks. Craigielaw and near Gifford - Crossbills.
- 14/7 Gannet chicks, some 6-7 weeks old now. Lone Coot swimming near Bass Rock. Joppa - 13 Manx Shearwaters, Great Northern Diver in breeding plumage. Aberlady - Mediterranean Gull and a Redpoll. 25-30 Porpoises in the Forth.
- 21/7 Bass - dark speckled plumage appearing on Gannet chicks. Isle of May - young Puffins will soon be jumping into water, under cover of darkness. Adults will start to disperse and the Puffin season will be over.
- 29/7 Very few Guillemots and Razorbills left on cliffs. Elephant Hawk Moth seen around harbour.
- 4/8 Young Cormorants on The Lamb are obvious, with their pale bellies. Musselburgh - juv. Little Ringed Plover on westernmost scrape. Torness - Great and Arctic Skuas, Manx Shearwaters, Mediterranean Gull and Little Gull. Common Arctic and Sandwich Terns.
- 11/8 Isle of May - young Puffin chick (abandoned? left nest in burrow too soon?) being fed by warden. 2 Porpoises heading west towards Craigleith.
- 18/8 2 Gugas (juv. Gannets) back on Bass. 1 Gannet still sitting on an egg; 3 very young chicks 2-3 wks old. Isle of May - Storm Petrels ringed at night. Barns Ness early morning sea-watch - Manx and Sooty Shearwaters, Arctic, Great and Long-tailed Skuas. Isle of May - 2 dozen Grey Seals hauled out.
- 25/8 Older juv. Gannets tossing and juggling with sticks and feathers. This behaviour emulates movement made when having to catch fish for themselves. Seton Mains - Marsh Harrier. Tynninghame - Buff-breasted Sandpiper and Pectoral Sandpiper. Jay heard.
- 1/9 New camera put on Isle of May, to watch Seals give birth and suckle young. Musselburgh - Barred Warbler behind scrapes. Aberlady - Black Tern offshore. First Pinkfeet arrived 3 days earlier than previous year.
- 15/9 On Bass Rock, Gugas seen everywhere. Swallows with new brood near High Street.
- 29/9 1st Purple Sandpiper of winter spotted 23/9; 5 seen on 28th. 2 Knots on 28/9. Aberlady - 6500 Pinkfeet, 80 Barnacle Geese and a Brent Goose. First 2 Twite seen.
- 13/10 1st Grey Seal pup born 8/10 - 2 days later than last year. Last eggs of Gannets hatched. Sheriffhall - House Martins still with chicks. Isle of May - one adventurous Seal pup with a black face, causing amusement. It went into the sea too early. (Grey Seal pups are not waterproof), so Mum had to chase him out again. It now explores the shore actively. Aberlady - Fieldfares and Redwing. Torness - Paddyfield Warbler seen - first sighting ever for mainland Scotland.



Black Terns at Aberlady

RAINFALL IN CORSTORPHINE, 2005

Munro Dunn

Most months in the first half of 2005 were wetter than average, while most in the second half were relatively dry, but the variations from average were generally not large. October however, was the exception and a notable one at that, with 147mm of rain, double the October average.

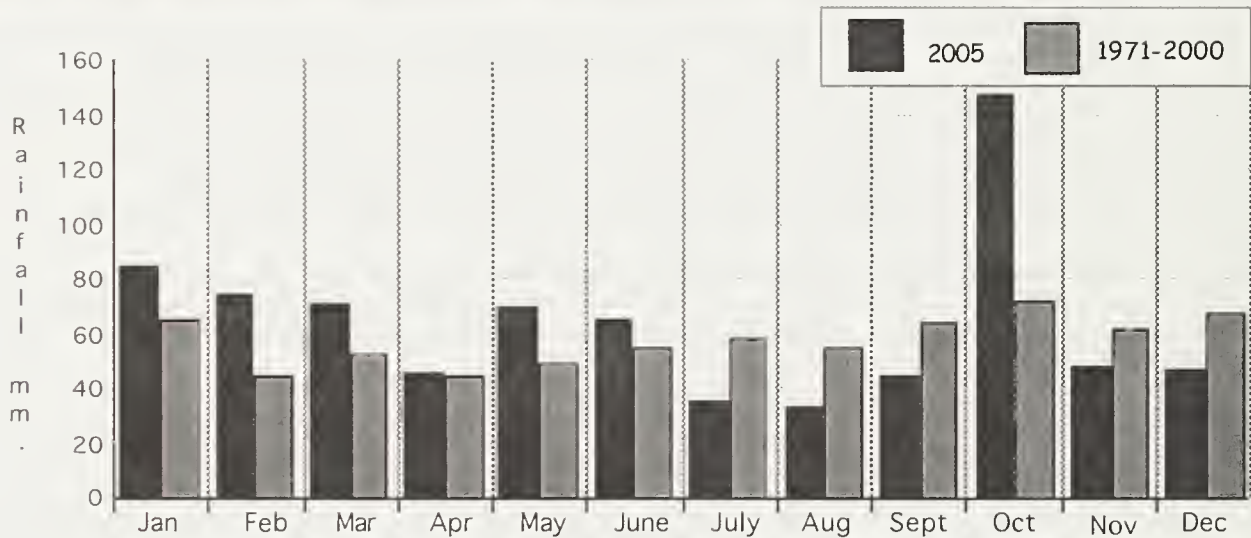
The overall result was a total rainfall of 768mm as compared with the long-term average for this location of 694mm. As with the aggregate rainfall, so too the number of days with significant rain, at 193 was somewhat above average.

The chief contribution to the very wet October came on the 11th of that month when 59mm fell. This was the second wettest 24-hour period over what is now 40 years of recordings. However, while October 2005 was very wet, October 2002 was wetter. Then 173mm fell, making that the wettest month in the 40 year run.

At the other end of the scale were runs of 11 days in early May and mid-November with no significant rainfall, while July had two separate dry weeks.

COMPARISON of RAINFALL in 2005 with AVERAGE for 1971 - 2000 (Millimetres)

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2005	84	75	71	46	70	65	36	33	45	147	49	47	768
1971 - 2000 Average	65	45	53	45	50	55	59	55	64	72	63	68	694



HAZEL FLOWERING AT THE BOTANICS - the Advancement continues.....

Geoffrey Harper in his article in last year's Journal wrote:

Climate change seems to be affecting early spring flowers most strongly - much more so than late spring and summer flowers, most of which are hardly affected. Pride of place must go to Hazel Corylus avellana in the race to flower ever earlier.

The latest first-flowering dates recorded show that the advancement has continued for a fourth season. The west bush flowered on 16th December 2005, 15 days earlier than in 2004, advancing the first-flowering date by 37 days over four seasons. The east bush, always the earliest flowering, flowered on 15th November 2005, 11 days earlier than 2004, advancing by 69 days over four seasons.

PLANT GALLS

On outings this year the Society has seen some rather large and spectacular galls on plants. Most galls are caused by insects which lay their eggs into the plant tissues, producing growths which isolate, but also protect, both eggs and larvae, and provide food for the latter. The gall-making insects are pretty good botanists and generally confine their attention to particular plants or groups of plants.

One gall we have seen on a number of occasions is produced by a midge *Rhopalomyia palarum* or *ptarmicae* on Sneezewort *Achillea ptarmica*. Instead of producing a cluster of flowers, infected plants produce a large spongy gall, like a compacted flower-head.

One of the places where we saw this gall (Easter Inch Moss on July 30th) seemed to be quite rich in unusual galls, and we saw two which make large oval swellings in plant stems; one on Hawkweeds *Hieracium* sp., is caused by a Gall Wasp, *Aulacidea hieracii*, the other on Bay Willow *Salix pentandra* by a Sawfly, *Emura amerinae*. I was delighted to see the gall on the Hawkweed, as it solved a puzzle: I realised it was the same gall I had seen (and photographed) on a plant during the Nats trip to Glen Roy in 2001. I had not been able to identify the plant, which was not in flower at the time; now I know it was a Leafy Hawkweed!

The gall on the Bay Willow is like a hard nut in the stem. It's unusual to see Bay Willow in large quantities, and that perhaps accounts for the presence of the gall, and also for a rust *Melampsora laricipentandra*, which alternates between Larches *Larix* spp. and this particular Willow.

Rusts do not normally make galls, but at Dunkeld we saw one that does: *Gymnosporangium cornutum*. Its primary host is Rowan *Sorbus acuparia*, where it produces clusters of 'eyelashes' on small swellings on the undersides of leaves, usually indicated by red spots above. Most rusts have two hosts, the secondary one in this case being Juniper *Juniperus communis*, where it produces orange jelly-like 'tongues' on the stems, which turn brown as they dry out. Both plants need to be present in the area for the rust to thrive.

Another gall caused by a fungus *Taphrina alni* - not in this case a rust - was found on a number of occasions on the young 'cones' of Alders *Alnus* spp. It takes the form of bright red 'tongues' which look quite spectacular when emerging from young green cones. (See photo page) As the cones (strictly speaking female catkins) mature, the tongues darken and go black.

Jackie Muscott

Ref: *British Plant Galls* by Margaret Redfern and Peter Shirley; Field Studies Council Publications



A healthy Sneezewort



Midge Gall on Sneezewort



Wasp Gall on a Hawkweed



Summer Winter
Sawfly Gall on Bay Willow

A SHORT TALE

Yet again in this past year our garden has offered good accommodation for local wildlife. Fairly early in the year an attempt to turn out the contents of a 'Dalek' type compost bin revealed a dainty little nest of pleated grass blades. A couple of Short-tailed Voles were distressed by our plans and, although we did our best to remedy the damage and re-cover the area, it eventually became obvious that they had moved elsewhere.

However when the need for compost increased and the larger 'open-plan' box was pressed into service, it became apparent that vole-housing was once more under threat. This time a nest with at least six young ones was disturbed. The nest and young ones were gathered together in a container and placed towards the back of the heap. The parents collected them one by one and carried them off. It is presumed that all went well, as from time to time when the carpet was lifted from the top of the pile, Voles were seen scampering over the surface of the re-constituted heap.

Young voles reach maturity in six weeks. Local predators (apart from humans) which may threaten them include foxes, owls and cats. At the end of the nineteenth century voles posed such a serious threat to agriculture in the south of Scotland that a 'Vole Committee' was formed in 1892.

Eunice Smith

NATURE WATCH (1) Nuthatches

Remember in last year's Journal, Natalie asked for observations of Nuthatches? We have not had many sightings reported, but keep them coming, please. As soon as you have seen one, drop a note, phone or e-mail to one of the editors or the secretary.



We had only four reports this year:

Molly saw one in the garden of Moffat House Hotel on 25th June and another on 3rd September, in a Yew tree at Darnick, Melrose.

Margaret Watson reported one on a garden feeder at Dunglass, on 1st July.

Jean Murray's Nuthatches are back. A pair - one male, one female - have been coming to the bird table in her garden in Galashiels throughout November and December, and are still around.

We were not so lucky at Baron's Haugh, in September, though they are breeding along the River Clyde there. Large barrels, blocked off at either end, but with long, narrow slits low down, had been put out for Bats nesting, on the Dalziel Estate at Motherwell. Lo and behold, a pair of Nuthatches took up residence - the most northerly reported breeding site!

They do not migrate, so keep a look out for them all year.

WAXWINGS

Waxwings were feeding on Whitebeam berries and resting and preening on tall Elm trees in Victoria Park last December and January. On 26th December (2004) at dusk, a large flock, I think more than 100, gathered in one of the Elms, all facing westwards; they all became very still and quiet, then suddenly the whole flock took off, flew across the park into the sunset, eventually disappearing in the distance. It was very dramatic and quite emotional. *Helen Knox*

EXCURSIONS 2005



		DATE	PLACE	LEADER
January	15th	Saturday	Erraid Wood	Helen McKay
February	19th	Saturday	Musselburgh Lagoons	Grace Jamieson
March	19th	Saturday	Fife Walk	Sandra Stewart
April	16th	Saturday	Bo'ness	Andrew Gilchrist
	30th	Saturday	Port Seton	Bill Baird
May	7th	Saturday	Roslin SWT	Betty Smith
	14th	Saturday	Isle of May	Joanie Fairlie
	21st	Saturday	Hamiltonhill	E & E Perry
	28th	Saturday	Kirkton Glen	Mary Clarkson
June	1st	Saturday	Tyne Estuary	David McAdam

MULL

Monday 6th - Friday 10th June

	15th	Wednesday	Loanhead	Janet Watson
	18th	Saturday	Gullane	Margaret Watson
	22nd	Wednesday	Craigie Hill	Eunice Smith
	25th	Saturday	Glen Moss	Norman Tait
	29th	Wednesday	Hermitage of Braid	Stephan Helfer
July	2nd	Saturday	Lumsdaine & Dowlaw Dean	Michael Braithwaite
	6th	Wednesday	Abercorn/Blackness	Christine Rae
	9th	Saturday	Newhall	Mike Jones
	13th	Wednesday	Longniddry Bents	Jackie Muscott
	16th	Saturday	Bara Farm	George McDougall
	20th	Wednesday	Red Moss	Margaret Perry
	23rd	Saturday	Selkirk Racecourse	Jeff Waddell
	27th	Wednesday	Water of Leith/Currie	Molly Woolgar
	30th	Saturday	West Lothian Circuit	Jackie Muscott
August	6th	Saturday	Tibbie Shiels	Neville Crowther
	13th	Saturday	Calder Wood	John Watson
	20th	Saturday	Aberlady	Bill Clunie
	24th	Wednesday	Linlithgow Loch	Natalie Taylor
	27th	Saturday	Stobo	Frances & Munro Dunn
September	3rd	Saturday	Doune Ponds	Janet Watson
	10th	Saturday	The Hermitage	Lyn Blades
	17th	Saturday	Portmore	Mike Richardson
	24th	Saturday	Baron's Haugh	Ian McCallum
October	8th	Saturday	Wooplaw Wood	Neville Crowther
	22nd	Saturday	Pentcailand/Saltoun	Lyn Blades
November	19th	Saturday	Dalkeith Oak Wood	Mike Walsh
December	28th	Wednesday	Cramond	Janet Watson

EXCURSIONS 2005



ERRAID WOOD

Date 15th January
Leader Helen McKay, SWT

This was a lovely place for our first outing of the year. There was lots of interest and pleasant views eastward. We do not have a report.

Editors

MUSSELBURGH LAGOONS

Date 19th February
Leader Grace Jamieson

With Grace leading in place of Natalie, who unfortunately had to be at work, we rallied at the Goose Green car park. It was a coldish day with a bit of a wind blowing and people were not keen to stand around too much. Well, we all know how much colder it is down by the sea. There were the usual culprits by the river mouth - nice to see 20 Redshank on the far side, Eider Duck, Black-headed, Herring and Lesser Blackbacked Gull, identified by PYP (pink yellow pink) in the legs, Herring - pink, LBB - yellow, differing from Great Blackbacked - pink. Along the shore we had Grey and Golden Plover, Oystercatcher, Dunlin and Turnstone, with a Rock Pipit sitting briefly on the sea wall. In the sea at the outflow of the river were Mute Swan, Goldeneye, whose males were beginning to display, and a number of Red-breasted Merganser. Further out and half way along the cinder path we had lovely views of Long-tailed Duck and Velvet Scoter, and in the bay before the power station we saw a Red-throated Diver and Slavonian Grebes.

Turning inland towards the scrapes, a lovely wee flock of Linnets flew overhead. From the hides we saw Wigeon, Teal, Oystercatcher, Black-tailed Godwit, Snipe, an adult Heron with a juvenile, Pied Wagtail, Crow, Starling, Blackbird and Robin.

By this time there were only a few people left, most having returned to their cars. We had our sandwiches and wandered over to the boating pond, with a small mixed flock of Skylark and Meadow Pipit flying overhead. I was scanning through the Mallard, male and female Tufties and a Merganser on the pond when a flash of blue (blink and you miss it type of thing) zipped through my field of vision - I can only

assume it was a Kingfisher. It disappeared into the trees on the far side of the pond, not to be seen again. Past the pond, in the field to the left I noticed two or three Curlew; then more, and more, and more. By the time I finished counting I had 90, with probably more out of sight.

All in all another good Nats winter outing. Thanks to Grace for leading.

Joanie Fairlie

REMEMBER: PYP

IDENTIFYING PINK YELLOW PINK LEGS,
HERRING Gulls have PINK LEGS
LESSER BLACKBACKED Gulls have YELLOW LEGS
GREAT BLACKBACKED Gulls have PINK LEGS

FIFE WALK

Date 19th March
Leader Sandra Stewart

We gathered at the car park to the west of Kinghorn with the prospect of a pleasant coastal walk 'on the other side of the water', but knowing it was a little too early in the season to find many plants in flower. It was a mild and muggy day, with a fine mist rising from the sea and the tip of Inchkeith Island emerging above it. Our attention was immediately drawn to twelve pairs of Fulmar nesting on ledges in the vertical face of the nearby cliff. Pairing of Blackbirds and Dunnocks was also noted. To our delight, quite a number of plants were in full bloom. On either side of the steps leading down to the harbour were Lesser Celandine *Ranunculus ficaria*, Red Deadnettle *Lamium purpureum* and Common Field Speedwell *Veronica persica*. A colourful, bracket-like fungus *Gloeophyllum sepiarium*, was growing on conifer logs, its rich brown upper surface edged with a creamy rim.

The walk continued uphill from the harbour, then through a playground to the signposted Coastal Path. En route, a display board informed us that Kinghorn has been a Royal Burgh for 800 years. The town grew up around the harbour and the water supply from Loch Burn, the inhabitants trading in coal, fleece and hides. Beside the path were several handsome plants of Alexanders *Smyrniolus olusatrum* in full bloom, bearing heads of yellow umbels. Some were infested



Is that a magic wand...or what ?
Port Seton 30th April

MP



MP

Where have these Nats gone?
Can they not keep up ?



There they are - glad of a seat at last ! MP

Margaret's last outing as leader,
before passing on the baton.
Gullane 18th June

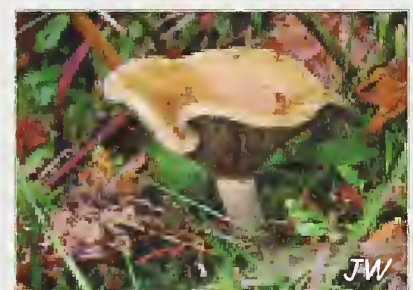
She always chose the loveliest
of places. We will miss her
outings.



DS



Pow-wow at Glen Moss 25th June MP



JW

Brown Roll Rim fungus *Paxillus involutus* with its distinctive
rolled-in edges on the cap

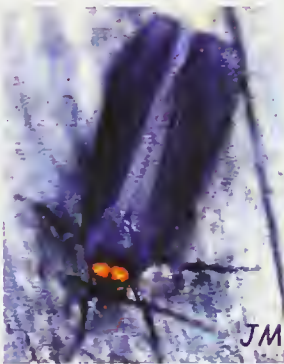


Patrick's Fox - free to roam

What on earth are they looking for ?? Dowlaw Dean - 2nd July



Emperor Moth Caterpillar and Red-necked Footman at Glen Moss 25th June



Me and my Shadow at Newhall, 9th July



Well, perhaps 'No comment' !



The amazing Red Tongue fungus on Alder cones - Calder Wood 13th August



This is the Long-horned Beetle found in Mull



Caterpillar of the Chamomile Shark Moth
..... and Bloody Cranesbill
Geranium sanguineum
-- both of which we saw at Longniddry 13th July





There was great discussion about this beautiful tree, flowering at its best at Bara Farm, on George's outing on 16th July. Margaret did some research and confirmed it to be the Japanese Dogwood, also known as Japanese Strawberry Tree



Yes, that really is a Comma, George. Bara Farm 16th July



Is this a Vetriciano? Aberlady 20th August



Roger's Corncrake on Iona



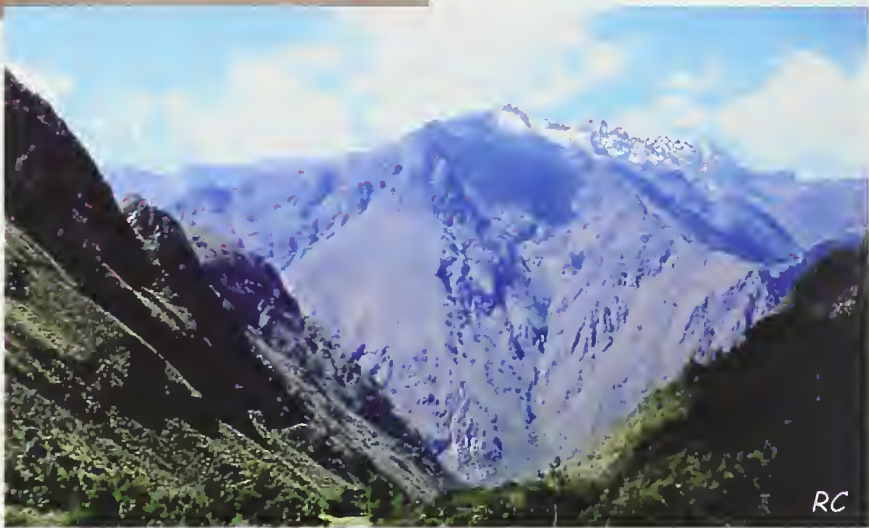
Baby Grey Seal on Inchkeith BB



Roddy at Dead Woman's Pass, kneeling on the right holding the flag

RC

..... and what a view from that Pass!



RC



Deciding what's what at Wooplaw, 8th October

JW

Northern Eggar Moths



Female



JM

Male cosying up to female



JF

Daubenton Bats at Linlithgow Palace
24th August



and the Caterpillar



GC

Large Red Damselfly, which breed at Bawsinch

with a rust *Puccinia smyrnii* in various stages of its life cycle, one appearing as orange spots on the underside of the leaf. Colt's-foot *Tussilago farfara* was well in evidence, and a large patch of Lesser Periwinkle *Vinca minor* added a touch of colour to the scene. Further on we passed large banks of Winter Heliotrope *Petasites fragrans*. They were well past the flowering season, though a few fragrant blooms remained to help in their identification. Out to sea were large flocks of Eider and several Cormorant; on the shore were Turnstone, Curlew and Redshank, whilst up above Skylark were trilling.

At the little bay below the ruined Seafield Castle, the leader called a lunch stop. The sun came out and Peacock Butterflies were flitting about among the Wallflowers *Erysimum cheiri* which grace the castle slopes. A colony of Atlantic Grey Seals basking on the rocks promised entertainment. They were distinguished by their flattish heads and Roman noses. A solitary Common Seal, having more appealing doggy-like features, lay apart on a nearby rock. Fossils are plentiful in the stones on the shore, derived from the limestone layers of this coastline. Small, circular cross-sections of Crinoids are common, Brachiopods and Corals are there too. On return to base at Pettycur, we were rewarded with the sight of Early Forget-me-not *Myosotis ramosissima*, Sea Champion *Silene uniflora* and Barren Strawberry *Potentilla sterilis* in bloom.

Margaret Perry

BO'NESS

Date 16th April
Leader Andrew Gilchrist

At the outset, conditions for this outing were inauspicious; Mary Robertson, the intended leader was unfortunately not able to be there, and in Edinburgh in the early morning, a biting wind accompanied by mist and rain was hardly conducive to encouraging members to venture out of doors.

In the event, and somewhat to my surprise, five members appeared at Bo'ness and we proceeded to examine the area along the Forth, west of the town. At one time a coal bing, the area has been roughly levelled and part sown with wild flowers (See report in the 2000 Journal for 24th June). It had been apparent from a recce earlier in the week that it was too early to find flowers, which were probably retarded by the unseasonally cold weather. Members resorted to trying to identify leaves and believed they were able to pick out Kidney Vetch *Anthyllis vulneraria* and three different Plantains – Ribwort, Sea and Hoary *Plantago lanceolata*, *maritima* and *media*. No sign was found of Orchids, and even the Wigeon which had been present earlier in the week had sought shelter elsewhere. Approaching lunchtime and feeling fairly chilled we decided to proceed to Muiravonside Country Park, which is more sheltered, to take advantage of the improving weather promised by the

forecast.

Muiravonside did not disappoint. It felt altogether milder and the usual spring flowers were showing well. Wood Anemone and Primrose were in flower, Wood Sorrel and Bluebell just starting, and the leaves of Lords and Ladies were shiny green.

Some time was spent examining the numerous areas of moss, and a few fungi were found on fallen trees.

Andrew Gilchrist

PORT SETON

Date 30th April
Leader Bill Baird

A beautiful day, a knowledgeable leader and a variety of things to see made this a memorable day.

We met at Port Seton Harbour, now a quiet peaceful place. We were told how in 1879-80 the harbour had had to be enlarged because there were so many boats. Many of these were drifters going after Herring, not only in this area, but following the shoals southwards along the English coast. As well as fish there used to be large Oyster beds just off shore, and Oysters were the everyday food of the poor. There were many shallow coal mines in the area, from which the best coal was exported and the poorer grade used in the production of salt. To crystallise the salt, fires had to be kept burning day and night, causing an acrid smoke to cover the area. The fishing, mining and salt production made this a noisy and rather unpleasant place to live, not as it is today, a peaceful seaside area.

As we walked eastward along the shore and looked out to sea we could see a ridge of rock, the Long Craigs, running in an E - W direction. This marks the position where the coastline used to be. Within living memory it has receded by many metres, mainly by the action of man rather than by nature. The Long Craigs is an igneous dolerite intrusion. This dolerite, a whinstone, is an excellent building material and was quarried extensively. We saw some blocks of dolerite on the beach which showed how quarrying had been done. The chisel marks were clearly visible. After each hammer stroke the chisel was given a quarter turn and when the holes were big enough, wood was inserted, water poured over it and the expansion of the wood split the rock. This quarrying and the many shallow mines has led to coastline erosion.

On the shore the rocks are mainly sandstone with a distinct dip to the west. At the far end of the bay they dipped to the east, showing this had been an anticline structure.

This area is in the Carboniferous Coal Measures and two good pieces of *stigmaria* were found. Although mainly sandstone there are also a few limestone beds and shales which are so rich in hydrocarbons as to be

almost coal. Within the sandstone we looked at cross-bedding, slumping and minor faults. There was a rock with clear fossil ripple marks, looking exactly like the present day ripples in the sand beside it. There were also surfaces showing bioturbation (disruption of sediment mainly by burrowing). We looked too at ironstone nodules of various shapes.

Leaving the shore, we turned inland, up a narrow path towards Seton Castle and Seton Collegiate Church. We then crossed grassland to the woodland of Seton Dean, across a further field and down Longniddry Dean, back to the main coastal road.

One of the fields we crossed had lain fallow for one year, after years of cultivation, and it was interesting to see how many 'weeds' it contained. As well as Field Pansy *Viola arvensis* there was Wild Pansy *V. tricolor*. Two kinds of Fumitory, Common Ramping Fumitory *Fumaria muralis* and Common Fumitory *F. officinalis* were growing side by side. Among the other flowers we saw were Fool's Parsley *Aethusa cynapium*, Bur Chervil *Anthriscus caucalis* and Sun Spurge *Euphorbia helioscopia*. Then at the end of Longniddry Dean we found Star of Bethlehem *Ornithogalum angustifolium*.

Peacock Butterflies, which now seem to be so common, were seen, as well as Orange Tip and Green-veined White. Among the birds we saw a couple of summer visitors - Swallows and Wheatears, the latter actually on the shore.

We had a real treat towards the end, with tea and cakes on the shore opposite the house where the Bairds are staying. It was much appreciated. Thank you Marion and Bill.

Betty Mitchelhill

ROSLIN GLEN

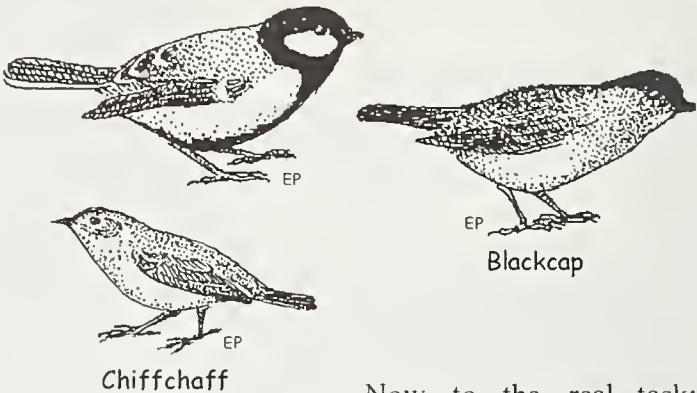
Date 7th May
Leader Betty Smith

Introduction to Woodland Common Bird Census
(CBC) methodology

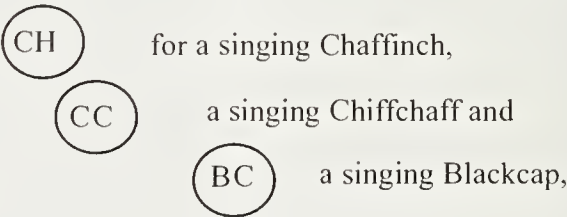
Despite, or perhaps because of, warnings that the paths were not user-friendly, being often steep, slippery, muddy deer tracks, a dozen or so intrepid members assembled at the Triangle car park in Roslin Glen at 9am.

A preliminary talk while we were able to gather round and stand on level, firm ground enabled us to study a sketch map of the part of the Scottish Wildlife Trust's Reserve we were about to survey. The map showed the River North Esk, the main road bisecting the reserve, the Triangle, the longer sides of which used to form part of the old road, several streams and runnels, and lots of Xs and little else. The Xs represent points at 50 metres horizontal distance apart. In the wood, trees

with a circle painted round the trunk and a number on a particular side of the tree indicate where that point should be, if not right at the tree. This enables the observer to mark on the map where an observation was made. Next we tried a practice survey of the Triangle, listening and looking for birds, and especially learning to identify the singing males. Soon all felt fairly proficient at recognising the songs of Robin, Blue Tit, Great Tit, Chaffinch, Wren, Blackbird and Willow Warbler.



Now to the real task: we were to cover an area to the north of the road, traversing all parts between the road and the river, at no point being more than 50 metres from our chosen route so that we should not have missed any singing bird. Going along the pavement let us hear and record on the map all the singing birds on the right-hand side of the road within 50 metres or so. When we reached the Ravine, the boundary of our part of the survey, we entered the wood to double back about 50 metres below. Stinging nettles, snagging brambles, slippery steep deer tracks and awkward overhanging branches were but transient difficulties to negotiate, and soon forgotten as the map was becoming filled in with symbols like



The last two being eagerly awaited migrants, arrived from Africa. A bird seldom seen and difficult to hear, was spotted climbing up and along a tree trunk seeking insect food. It was a Treecreeper, entered on the map as TC, but without a ring round it as we didn't hear it. Likewise a Magpie seen flying over but not heard was registered as

————>MP————>

Some 2½ hours after we started we toiled up the last steep slope back to our cars, with the satisfaction of not only having improved our recognition of the songs of the woodland birds, but also having contributed to the goodly number of registrations on the map.

Ten spring visits in total conclude the fieldwork. To each visit map, in chronological order, is allocated a letter of the alphabet. Individual species maps are then drawn, extracting the data from every visit map in turn, and using the alphabetic letter of the visit map now to

record that species on its own species map. After that it remains to study each species map looking for clusters of usually 3 or more singing males, to denote an occupied territory. The numbers and sizes of the territories vary greatly with the species. As an example, in the whole area of the CBC, which is three to four times the size of the bit we surveyed, we estimated in 2004 that there were 56 Chaffinch territories and three Great Spotted Woodpeckers. Figures for succeeding years can provide useful indications of local and even national increases or decreases in particular species.

Betty Smith

ISLE OF MAY

Date 14th May
Leader Joanie Fairlie

The Isle of May lies 5 miles southeast off the Fife coast at the mouth of the Forth estuary, a position that makes it one of the primary sites in Scotland during the spring and autumn bird migrations. The 57 hectare island is a basalt formation of cliffs to the west and softer, grassy slopes to the east. During the summer the cliffs are home to over 200,000 seabirds, which visit the island to breed. It was to see this spectacle that the Nats gathered at Anstruther to board the *May Princess* and visit the island.

Our crossing to the Isle was perhaps a little rough, judging by a few somewhat green faces, but such mundane thoughts were soon forgotten with the sighting of our first Puffin of the day. The Isle of May is home to over 42,000 breeding pairs of Puffin, which spend a good deal of their time on the sea around the island.

These are highly distinctive birds with their fabulous parrot-like, red, blue and yellow beaks, the colourful outer sheath of which is discarded in the winter. In fact their beaks and upright stance have contributed to the Puffin's nickname of 'Sea Parrot'. Puffins rejoice in one of the more interesting scientific names of *Fratercula arctica*. *Fratercula* comes from Latin meaning 'a friar' and refers to the hooded appearance and black and white plumage of the bird; *arctica* simply refers to the northern distribution of the species. Puffins nest in shallow burrows that they dig with their strong claws; alternatively they will appropriate a disused rabbit burrow. It is from these burrows that the Puffins' low growling 'arr' can sometimes be heard. The parents share the six-week duty of incubation that begins when the single egg is laid in mid-April, so the birds we were watching on the sea would have been a mixture of non-breeders and off-duty parents.

As the boat drew into the landing at Kirkhaven (unsurprisingly named due to the proximity of the sheltered area to the island's chapel), we were greeted by a noisy flock of Arctic Terns, diving and swooping close to the boat. One of the first terrestrial island

inhabitants that we met was a Garden Tiger Moth caterpillar, leisurely making its way across the path from the landing to the visitors centre. Unfortunately, the SNH warden who had been due to meet and guide us around the island was unexpectedly unavailable, so we split up and started exploring for ourselves.

There is so much to see on the Isle of May that the three hours landing we had was scarcely enough time to cover all the ground, let alone see and appreciate everything. The small party of which I was one, initially headed south towards the South Horn and Lady's Beds. From there we were able to get the most fantastic views of the Guillemots, Razorbills, Shags, Kittiwakes and Fulmars nesting on the cliffs, as well as the Gulls and occasional Gannets flying by. After stopping for a quick spot of lunch at the visitor centre (under the watchful eye of a female Eider who was showing all the good sense for which ducks are renowned, by nesting on the very edge of the footpath!), we were determined to see as much of the rest of the island as time would allow. Our first stop was at the man-made loch, which was truly magical, with the high slopes either side forming a natural sound barrier, blocking out the sounds of the sea and seabirds, and acting like an amphitheatre for the ethereal cooing of the male Eiders on the loch. We continued on, past the main light, and crossed to the low light, which although now obsolete as a light, is home to the volunteers who stay on the island to work at the bird observatory. The observatory, the first in Scotland, was established in 1934 with the construction of heligoland traps to trap migrants passing through.

As the time mercilessly ticked by, we regretfully made our way back along the Holyman's Road to Kirkhaven, and (for once not quite last!!) took our places on the boat. Before finally heading for home we were able to sail around the island, admiring the seabird cities from another angle and being awed by the scale of the cliffs that they inhabit. We were also able to get good views of the Grey Seals hauled out on the rocks near Pilgrim's Haven, where the Scottish Seabird Centre has set up cameras so the Seals can be viewed from the Centre when they pup in autumn.

As we finally turned from the island and headed back to Anstruther, the birds around the boat became fewer and the island retreated into the horizon, becoming a fuzzy image of the furious and frantic lives of the birds that breed there.

Our thanks to Joanie for another super outing.

Natalie Taylor

HAMILTON HILL

Date 21st May
Leaders Eric and Eileen Perry

On the day, Eric decided that he did not wish to climb the hill. He shepherded us together and made sure that we set off in the right direction, before going home to

prepare for the afternoon invasion. We were sorry not to have his company, but Eileen proved herself to be an excellent leader on her own.

We started off from Peebles Cemetery car park, walking in a westerly direction. The pavement runs alongside the high park wall on which we noted several of the plants which have a liking for walls, such as: Brittle Bladder Fern *Cystopteris fragilis*; Maidenhair Spleenwort *Asplenium trichomanes*; Wall-rue *A. ruta-muraria*; Ivy-leaved Toadflax *Cymbalaria muralis* and Wall Speedwell *Veronica arvensis*, one which is not always found on walls.

Before crossing the A72 to reach the hill track, we heard the song of the Mistlethrush, and four of the songsters were spotted. As we made our way up the rough track which crosses the golf course to reach Jedderfield Farm we found a large selection of late spring flowers. These included more Speedwells, a few Celandine *Ranunculus ficaria*, still in flower, Spring Whitlowgrass *Erophila verna*, a very large form growing in rich soil, probably shale, Mayflower or Lady's Smock *Cardamine pratensis* and many others.



Mistle Thrush

Still climbing, on a field edge, with woods to our left, we spotted Red-berried Elder *Sambucus racemosa* among the trees, and took time to rest and admire the splendid views of the Tweed valley to the south of us. Among the grass grew one of the less common native Lady's Mantles *Alchemilla filicaulis* ssp *vestita*, with densely pubescent upper stems, inflorescence and upper side of leaves. (*Vestitus* means clothed).

After a brief sortie into a Beech wood we continued on the track upwards onto open moor. Here we found shelter by an old dyke and ate lunch. A different flora inhabits this side of the hill, with Sedges and other bog plants in evidence. Flea, Spring, Pill and of course Glaucous Sedge *Carex pulcharris*, *caryophyllea*, *pilulifera* and *flacca* were noted, along with Common Lousewort *Pedicularis sylvatica*, Bog Stitchwort *Stellaria uliginosa*, Bitter Vetch *Lathyrus linifolius*, Wild Pansy *Viola tricolor* Tormentil *Potentilla erecta*, Butterwort *Pinguicula vulgaris* (pale green leaves and flower buds only) and lots of a very dark blue Milkwort *Polygala vulgaris*.

We admired the views to the north and east, before turning down the farm road to Standalane and back into the town.

This enjoyable excursion ended with the traditional visit to Kilcreggan for tea and cakes. This time we met inside, although tea in the garden would have been possible as the sun came out just as we arrived. Thank you once again Eric and Eileen for a lovely day.

Lyn Blades

KIRKTON GLEN

Date 28th May
Leader Mary Clarkson

This was intended to be an outing on which some of our Scottish alpine plants could be seen without climbing to Munro height, using a good path which runs north up Kirkton Glen from Balquhidder to Ledcharrie in Glen Dochart. The route follows forestry tracks in Kirkton Glen with a short section of hill path at the head of the valley leading to the col where the interesting plants are to be found. Unfortunately, the weather on the day chosen for the excursion (and on the preceding one on which the recce took place) was very wet and the leader felt she had no choice but to try to stop people making the drive from Edinburgh. In the event, a party of six made a circuit of the Glen without climbing the hill path. The most spectacular sight of the day was the river descending with tremendous force and speed, boiling and frothing, fed by many side streams, white ribbons from top to bottom of the hillsides. The day was not a complete washout botanically as Bugle, *Ajuga reptans*, Marsh Violet, *Viola palustris* and Common Butterwort, *Pinguicula vulgaris*, were at their best and in abundance; there was a good variety of ferns including Oak Fern *Gymnocarpium dryopteris*, Beech Fern *Phegopteris connectilis*. Two Saxifrages, Starry and Yellow, *Saxifraga stellaris* and *S. aizoides* and the orange fungus Bog Beacon *Mitrella paludosa* brightened up a couple of the ditches.

Mary Clarkson



Not a complete washout ?

LOANHEAD

Date 15th June
Leader Janet Watson

Janet introduced us to this area called 'Ramsay'; quite close to the centre of Loanhead. Eleven members were present, on a fine evening which followed a mainly rainy day. 'Ramsay' is a levelled colliery bing, areas of which have been planted with a large number of trees.

Walking along the main path we were first conscious of a considerable variety of trees. Our list of

identification included some form of Cherry, Oak, Larch, Birch, Ash, Rose, Rowan, Alder, Hawthorn, Field Maple, Whitebeam, Scots Pine and Spruce. From the trees Willow Warbler, Thrush, Linnet, Chaffinch and Bullfinch could be heard singing; meantime, Swallows and Swifts were flying overhead and a Kestrel was observed.

Among plants, Goat's-beard *Tragopogon pratensis* was a notable find, and near the end in a wet area, both Northern Marsh and Common Spotted Orchids *Dactylorhiza purpurella* and *D. fuchsii* provided a colourful conclusion to an enjoyable evening.

Andrew Gilchrist

GULLANE TO EYEBROUGHTY

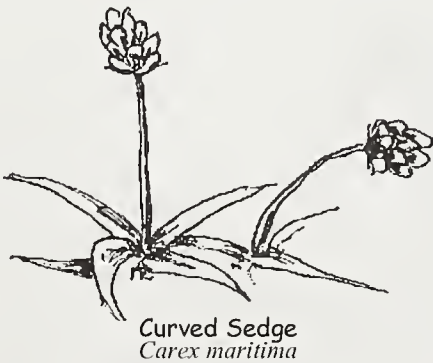
Date 18th June
Leader Margaret Watson

As the weather was very hot and humid we did not make it to Eyebroughty - but it was a lovely walk all the same. We took the inland track from the Gullane car park, past some beautiful patches of wildflower meadow with Red and White Campion *Silene dioica*, *S. latifolia*, Red Clover *Trifolium pratense*, Ox-eye Daisy *Leucanthemum vulgare*, Vipers' Bugloss *Echium vulgare*, Goat's-beard *Tragopogon pratensis*, Twayblade *Listera ovata* and Yellow Oatgrass *Trisetum flavescens*. Later we passed interesting weeds like Small Bugloss *Anchusa arvensis*, Opium Poppy *Papaver somniferum*, Fiddle-neck *Amsinckia micrantha* and the sand-loving Hound's Tongue *Cynoglossum officinale* with its reddish-brown flowers.

The Comma Butterfly which had been seen in the area previously did not oblige us, but we did see Small Heaths, Green-veined Whites, an Orange Tip and several Cinnabar Moths.

We returned along the shore, passing a splendid patch of Scot's Lovage *Ligusticum scoticum*, but with invading Japanese Rose *Rosa rugosa* dangerously close. Sadly we could find no trace of the Curved Sedge *Carex maritima* which appeared a few years ago in a wet patch - probably trampled to death.

There were Sandwich Terns noisily fishing out to sea while we heard and saw a number of warblers -Whitethroat, Willow Warbler and Sedge Warbler in the scrub. By the time we got back to the car park we were all hot and sticky, so the ice cream van waiting there was very welcome, as was the



Curved Sedge
Carex maritima

nearby tea shop. I was sorry to hear that our leader of the day, Margaret Watson, was 'retiring' - a great pity, as she always seemed to find interesting places to take us, and to have boundless energy. Thanks, Margaret.

Jackie Muscott

CRAIGIE HILL

Date 22nd June
Leader Eunice Smith

Eleven members gathered at Craigie Farm to explore this mainly woodland site on a pleasant summer's evening. Eunice Smith gave an introduction to the area and explained that we would be visiting the woodland part of the site, largely undiscovered until recently when it had been opened up. Many of the paths had been completely overgrown, but now branches have been pruned and path surfaces improved to give a network of all-weather pathways linking to surrounding areas. New interpretation boards have been erected with information about the nature and history of the hill. The former quarry, which had become a dump, has been restored to its former state.

The deciduous woodland contained a few interesting plants, with Early Hair-Grass *Aira praecox*, Three-veined Sandwort *Moehringia trinervia* and Climbing Corydalis *Ceratocarpus claviculata* being noted early in the evening. The most spectacular plant of the evening was the beautiful spread of Honeysuckle *Lonicera periclymenum*. A few fungi were also found including Birch Polypore *Piptoporus betulinus*, the Blusher *Amanita rubescens* and 'Lemon Curd' *Myxomycete*. A very deformed frond of Broad Buckler Fern *Dryopteris dilatata* created some interest and was found to contain small woodlice. A large Hornbeam tree was found near the boundary wall and much time was spent debating how to measure its diameter and many attempts at estimating the diameter from its circumference were made.

Members enjoyed the excellent evening views from the quarry rim, and Jackie and Roger descended into the quarry which contains a number of interesting and unusual floral species. All of these previously recorded species were quickly found, including Mossy Stonecrop *Crassula tillaea*, Twiggy Mullein *Verbascum virgatum*, Small Cudweed *Filago minima* and also a good quantity of Scarlet Pimpernel *Anagallis arvensis*.

Roger Holme



GLEN MOSS, KILMACOLM

Date

25th June

Leader

Norman Tait, Glasgow NATS

Glen Moss was our only bus trip this year, and the party turned up at Donaldson's School in plenty of time - except, that is, for the driver and his bus. By 9.15 everyone was getting twitchy and calls were going out for mobile phones as attempts were made to contact the bus company, and to warn our leader, Norman Tait, that we were likely to be late.

In the midst of the excitement a disembodied voice was heard demanding to know what we were doing. It belonged to a head peering blearily out of an upper window of the gatehouse, and it sounded pretty annoyed, and refused to believe we had permission to park there.

Eventually the bus arrived, the gatekeeper was mollified and we all got aboard. Our adventures were not at an end, however, for our driver, who turned out to be Russian, sailed off the M8 without realising he had done so, and we ended up taking a rather devious route to Kilmacolm. (It's a good idea to stick to the centre lane on the M8!) We were an hour late but found Norman Tait, his wife Pearl and a small contingent of Glasgow Nats waiting patiently for us.

Glen Moss is an extraordinary area. Until the 1914-18 war it was regularly flooded for curling, but was then abandoned until being taken over as a Scottish Wildlife Trust reserve. Though drier than formerly, there is still plenty of marsh, plus ponds and open water, with an interesting mix of plants and a large number of breeding Dragonflies.

One of the most interesting plants is the Tufted Loosetrife *Lysimachia thyrsiflora* which is rare in the UK, most of the population being centred on southern Scotland. There are patches along the Union and Forth-Clyde Canals, but at Glen Moss it can only be

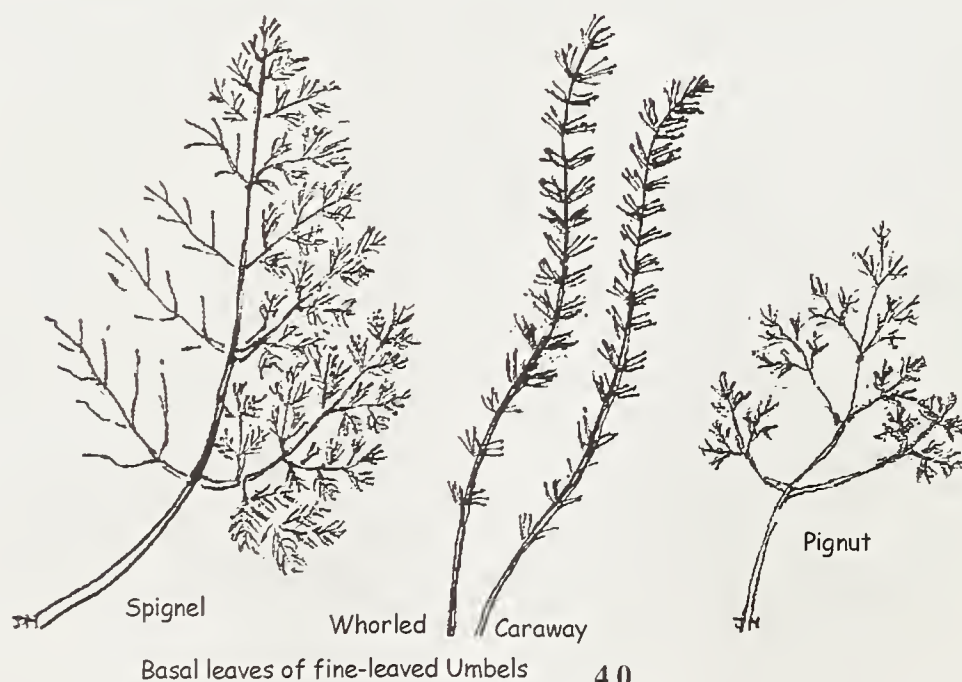
described as abundant. It flowers rather sparingly, producing yellow spikes which grow out of the lower, rather than the upper leaf axils, but we were pleased to see that one or two of the Glen Moss plants were coming into flower.

A couple of unusual fine-leaved umbels are also to be found here: the strongly aromatic Spignel *Meum athamanticum*, another national rarity, usually found in mountain grassland, and Whorled Caraway *Carum verticillatum*, a marsh plant with a western distribution. There were plenty of sedges including the attractive little Bog Sedge *Carex limosa* which grows in profusion on Rannoch Moor.

A number of Orchids were seen, the rarest being Coralroot *Corallorrhiza trifida* of which we saw just one plant. We also saw a single plant of the Greater Butterfly Orchid *Platanthera chlorantha*, still in bud, but plenty of specimens of Heath Spotted Orchid *Dactylorhiza maculata* and Northern Marsh Orchid *D. purpurella* in full flower.

Insects included the Chimney Sweeper Moth *Odezia atrata*, a small, black, day-flying moth with just a touch of white on each wing-tip. Its larvae feed on Pignut *Conopodium majus* which was in good supply. The striking pink-spotted green caterpillar of the Emperor Moth *Saturnia pavonia* was noted in the heather, one of its food plants; and brightly-coloured Small Pearl-bordered Fritillary Butterflies *Boloria selene*, rare in the Lothians, were flying over the marsh. Their caterpillars feed on all kinds of violets, probably mainly Marsh Violet *Viola palustris* here.

Perhaps the most interesting insect was another moth, the Red-necked Footman *Atolmis rubricollis*, with black wings, a lot of yellow on its body and a red collar (two red spots in this case). This moth has a south-western distribution in England and Wales, plus an outlying colony in southern Scotland, so we were lucky to see it. Its caterpillars feed on algae and lichens, and we found it close to the woods on the edge of the Moss.



As for the Dragonflies, we were greeted with Four-spot Chasers *Libellula quadrimaculata* flying over open water, while later, near ponds we saw some early but immature Darters *Sympetrum*, and a number of Damselflies. These included the Blue-tailed *Ischnura elegans*, the Common Blue *Enallagma cyathigerum*, the rather similar Azure *Coenagrion puella* and the Large Red *Pyrrhosoma nymphula*. Some of the latter two species were in tandem and laying.

The rarest and most interesting birds seen were Tree Pipits. A Heron, a female Sparrowhawk and a family of Bullfinches were also spotted; and Wrens and Willow Warblers were in good voice.

It was a most interesting tour of a unique site, and it ended at the 19th hole of the nearby golf course where we all had a welcome cup of tea. Our thanks to Norman and Pearl Tait who made sure we did not miss any botanical rarities (and also negotiated our tea).

I'm glad to say our return journey was without incident!

Jackie Muscott

HERMITAGE OF BRAID

Date 29th June
Leader Stephan Helfer

Following the successful excursion to Cammo to look at microfungi in 2004, an interesting evening was spent in the Blackford Hill area with the same focus.

Numerous Rusts and Powdery mildews were found, as well as a Smut and a Downy mildew. There seemed to be a greater variety than at Cammo, though the reason may have been that participants were becoming more used to looking for these 'tinies' in the right places. From the meeting point in Midmar Drive, we walked down the path between the allotments and Blackford Pond, round the foot of Blackford Hill, made a sortie into the Hermitage of Braid and returned by a higher hill path and the pond.

Many, though not all, Rusts are host-specific – if you can identify the plant, you can often identify the rust. Rusts seen included *Puccinia cnici* on Spear Thistle, the honey-scented *Puccinia punctiformis*, on Creeping Thistle, *Phragmidium violaceum* which causes obvious violet spots on Bramble leaves and the bright orange *Phragmidium*



Rust on Nettle JM

mucronatum on Wild Rose. All phases of the life cycles of these rusts occur on the same host. We saw another orange rust, *Puccinia caricina*, which distorted the leaves and stems of Stinging Nettle. Only the early stages of its life cycle occur on this host and it later moves on to infect Sedges, as its name suggests. Powdery mildews pointed out to us on leaves included *Erysiphe asperifoliorum* on Field Forget-me-not, *Erysiphe depressa* on Lesser Burdock and *Microsphaera alphitoides* on Oak; all of these had a white powdery appearance. A mildew which looked brown and felty was *Sphaerotheca mors-uvae* which was seen on the fruits of Gooseberry - American Gooseberry Mildew to gardeners. Some yellowing leaves of this host were also infected with *Plasmopara ribicola*, our Downy Mildew for the day. The Smut shown to us was *Ustilago avenae* which had invaded the flowering parts of False Oat Grass, replacing the seed with its sooty spores.

An interesting find by the path at the foot of the hill was *Carex muricata* ssp *lamprocarpa*, Prickly Sedge, which is uncommon, though Blackford Hill is a known site for it. Nearby, Stinging Nettle leaves were being perforated by a host of tiny caterpillars, probably those of Peacock Butterfly. The evening was rounded off at Blackford Pond where we saw two Dabchicks and a pair of Mute Swans with five cygnets.

Mary Clarkson

DOWLAW MOSS AND LUMSDAINE DEAN

Date 2nd July
Leader Michael Braithwaite

Our walk was over the land of Mr Tom Dykes of Redheugh and Mr Ian Russell of Dowlaw. Mr Dykes met us at Harly Darlies and spoke to us at the old hill fort about the history of the area and his family's farming of it over almost a century. The moorland had been reduced soon after the war and, when a bog at Haul Yards was drained, timbers were found under the peat supposed to be of 'bog oak'.

Dowlaw Moss has muddy edges where cattle have plodged and this was the favoured habitat for fine colonies of Ivy-leaved Crowfoot *Ranunculus hederaceus* and Marsh Speedwell *Veronica scutellata*. The Moss itself is partly fen and partly raised bog, and has clearly been cut for peat in the past, as Mr Dykes had pointed out. It has a series of bog pools with White Sedge *Carex curta* and Round-leaved Sundew *Drosera rotundifolia*. Near the Moss an extraordinarily large-flowered plant of Tormcnil *Potentilla erecta* was found, with petals 8mm long, long pedicels and large deeply-dissected leaves. This corresponds well with *subsp. strictissima*, which has been recorded nearby on two occasions in the past, but we were puzzled that there was no clear population of this form amongst the abundance of the ordinary small-flowered form present. A specimen was sent to the Botanical Referee, Brenda Harold,

who identified it as *Potentilla anglica*, also a first record for VC 81 since 1916. There may well be hybrids about there also; one for next year!

The head of the Dowlaw Burn is a series of springs with a very rich flora including fine populations of Early Marsh Orchid *Dactylorhiza incarnata* subsp. *incarnata*, Marsh Lousewort *Pedicularis palustris* and Few-flowered Spike-rush *Eleocharis quinqueflora*. Here *Dactylorhiza x carnea* (*D. incarnata x maculata*), new to VC 81, was found with both parents in plenty, nearby. Purple-flowered forms of *Dactylorhiza incarnata* were found too, in a slightly less base-rich habitat, and appeared to belong to subsp. *pulchella*.

Lunch was taken amongst the Bell Heather *Erica cinerea* and Common Rock-rose *Helianthemum nummularium* of the burnside banks, before we proceeded across a very splendid wet meadow at the moorland edge. Zigzag Clover *Trifolium medium*, Marsh Valerian *Valeriana dioica*, Tawny Sedge *Carex hostiana*, Wood Horsetail *Equisetum sylvaticum* and Broad-leaved Cottongrass *Eriophorum latifolium* were present with many Orchids including a very deep-coloured form of Fragrant Orchid *Gymnadenia conopsea* subsp. *borealis* on a dry bank. Sneezewort *Achillea ptarmica* was found with the flower buds galled, by the Gall Midge *Rhopalomyia palarum* or *ptarmicae*. Lizards were seen and many butterflies, including Ringlet, Common Blue and Small Copper.

In the spectacular Lumsdaine Dean, colonies of Small Cudweed *Filago minima* and Common Cudweed *Filago vulgaris* were found, and Grayling Butterflies were seen before we visited the pond at Lowries Knowes and returned to the Dowlaw road where Squirrel-tail Fescue *Vulpia bromoides* was at the roadside.

Michael Braithwaite

ABERCORN

Date 6th July
Leader Christine Rae

After a very wet day we were surprised that ten people turned up for the evening walk through the Dalmeny Estate along the shores of the Forth. There was formerly a Celtic monastery at Abercorn. Nothing remains of that, but we went in to see the 9th century hogback gravestones which are very interesting. We did not require to use the very old style, but went through a gate and under old Yew trees, steeply down hill to the water's edge to gaze at the view across the Forth. The weather had improved beyond all expectations, so while some watched a lengthy display by a Pied Wagtail, others identified Vetches and found Bush Vetch and Hairy Tare. Among the plants seen were Lesser Burdock and Red Bartsia. The evening became so fine that we were reluctant to turn back, and continued on through the woods until we reached the shore again to admire the view once more,

after which we reluctantly turned back and did not reach Abercorn until after 9.30pm, well pleased with the evening in general.

Janet Watson

NEWHALL

Date 9th July
Leader Mike Jones

The lands of Newhall were an identifiable estate by c1406, when a Royal Charter was granted to Lawrence Crichton. This family's ownership continued for 200 years. From 1703 – 1735 the owners were Sir David Forbes and his son John, both Edinburgh advocates. They built a new house on the site of its predecessor, and this is the core of the present house. We are grateful to the present owners, Mr and Mrs Kennedy, for allowing the Society access to the grounds.

Saturday was a beautiful summer day of blue sky and sunshine, bringing out twenty-one members of the Edinburgh Natural History Society to enjoy a walk through the estate. On the right of the drive was a field of flowering grasses, amongst which were growing Common Spotted Orchid *Dactylorhiza fuchsii*, and hybrids. Meadow Browns, Ringlets, and Yellow Shell Moths were flying and the Wood Sedge *Carex sylvatica* drooped gracefully over the path. A new pond with an island has been created to the left of the drive, and here an Oystercatcher was guarding a nest with young.

The first stop was the walled garden built around 1790 by Robert Brown. Brittle Bladder Fern *Cystopteris fragilis* was growing on the outside of the wall and Pyrenean Valerian *Valeriana pyrenaica* along its base. The garden of beautiful flowers and humming bees was overlooked by the statue of Adam, the first gardener, 'ready to delve'. A new small pond here already has Newts, Whirligig Beetles and Pond Skaters.

Beyond the walled garden the path began to descend to the Glen. The steep-sided valley was formed by the melt water from the Pentland Hills. The North Esk now flows through it, and in the early 1800s the landscape of the Glen was set out as a series of walks. The poet, Allan Ramsay who wrote the pastoral comedy *The Gentle Shepherd*, spent time at Newhall with his friends the Forbes. At Craigie Bield, above the footbridge, a plaque is set in a rock bearing a quote from this work.

Marsh Hawksbeard *Crepis paludosa* was growing beside one of the bridges, and all along this stretch of the river were the seeding heads of Water Avens *Geum rivale*. Peggy's Pool is a delightful place, with a waterfall forming a backdrop to it. A diversion was taken by some members, through the Sandy Cave, and further on, where the ground was drier, were many plants of Melancholy Thistle *Cirsium heterophyllum*. *The Decoction of the Thistle in Wine being drunk, expels superfluous Melancholy out of the body, and makes a man as merry as a cricket.* The Turtle Bank

steps at the end led up the side of the glen to a Beech wood where Artist's Fungus *Ganoderma applanatum* was growing on one of the trees and Buzzards were calling overhead.

Margaret White

Leaving the Estate through the SE exit, the route took us downhill across rough pasture towards Carlops Burn, where Monkey Flower *Mimulus guttatus* agg. was in full bloom. After passing through the farm of Lonelybield, we crossed over to Harbour Craig, a prominent rock reputed to have Covenanter associations. Among the flowering plants were Marsh Lousewort *Pedicularis palustris*, Heath Speedwell *Veronica officinalis*, Milkwort *Polygala vulgaris*, Perforate St John's-wort *Hypericum perforatum*, Common Spotted Orchid *Dactylorhiza fuchsii*, and the Heath Spotted Orchid *D. maculata*. At the head of the valley, the scene opened out onto flat farmland. In the distance was a blanket bog where the find of the day was the Large Heath Butterfly, a species uncommon in the Lothians. Altogether it had been a fine day for Butterflies with at least five other species sighted: Common Blue, Meadow Brown, Small Heath, Ringlet and Red Admiral. Another rarity found in a small pond was Water Purslane *Lythrum portula*. We made our way back past Kittleyknowe, the home of the shepherdess, Jenny Armstrong, renowned from the paintings of Victoria Crowe. Our thanks are due to Mike for arranging an excellent excursion around Newhall and guiding the party over hitherto uncharted territory in the afternoon.

Margaret Perry

LONGNIDDRY BENTS

Date 13th July
Leader Jackie Muscott
(substituting for Mary Tebble)

Last year this meeting had to be abandoned because of heavy rain. This year the exceptionally fine, warm weather again began to break, but only enough to make the evening a little less balmy than had been anticipated. A large number of Nats turned out and were rewarded by a colourful show of flowers on the calcareous sands, including some local rarities. Most striking were the purplish drifts of Bloody Cranesbill *Geranium sanguineum* which dominate the area. Intermixed were other calcicoles, including the Clustered Bellflower *Campanula glomerata*, once found scattered along the Forth coast from Cockenzie



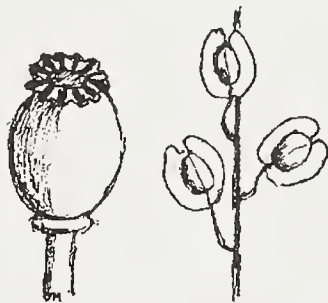
Melancholy Thistle
Cirsium heterophyllum

to Gullane, with colonies at North Berwick and Dunbar, but now confined to this area; also Burnet Rose *Rosa pimpinellifolia* or *spinosissima*, complete with its wasp gall *Diplolepis spinosissimae*; and the Rough Hawkbit *Leontodon hispidus*, a very hairy yellow daisy.

The handsome Musk Thistle *Carduus nutans* seems to be on the increase. It's a plant of dry calcareous soils, at the northern edge of its range in the Lothians, so maybe climate change has something to do with it. The large clumps were only just beginning to go to seed, but had nevertheless attracted a small flock of Goldfinches.



Musk Thistle
Carduus nutans



Opium Poppy Field Pennycress

A weedy area sported some interesting seeds: the large spherical capsules of Opium Poppy *Papaver somniferum* a garden escape, and the disc-shaped seeds of Field Pennycress *Thlaspi arvense*, an old field weed.

Closer to the shore were blue patches of another Geranium, Meadow Cranesbill *Geranium pratense*, and on the edge of the sands, the Perennial Sow Thistle *Sonchus arvensis*, a large yellow daisy, covered with glandular hairs, was just coming into flower. Beyond were saltmarsh plants such as Sea Milkwort *Glaux maritima* and Greater Sea Spurrey *Spergularia media*.

Roger caught a Yellow Shell Moth *Canptogramma bilineata bilineata* and we found a number of interesting caterpillars on their food plants: Peacock Butterfly on Nettles *Urtica dioica*, Cinnabar Moth on Ragwort *Senecio jacobaea* and most striking of all, the Chamomile Shark moth on Mayweed *Tripleurospermum*. The Sea Buckthorn Hoof Fungus

Phellinus hippophaecola was duly noted on an old bush, and on nearly all the low vegetation were quantities of pretty snails *Cemuella virgata*, white shelled with a single chocolate stripe. These snails like dry calcareous sites, but seem only to be found at Longniddry.



Cemuella virgata
(Life size)

A lovely evening, and something for everyone.

Jackie Muscott

BARA FARM, GARVALD

Date 16th July
Leader George McDougall

Yet another fine, warm and sunny day found us back at Bara in East Lothian. George, our leader, had once again secured the generous permission of the Younger family for us to roam around the farm house and estate.

Our first port of call was the garden, to see a fine specimen of a small tree in full flower. This was *Benthamidia* (formerly *Cornus*) *kousa*, the Japanese Cornel, also known as The Pilgrim Tree, but no one seems to know why. We all admired the tree to the accompaniment of twittering Swallows, which were swooping about in the fine weather. The house was fairly festooned with House Martins' nests, six around one window alone.

From here we explored along a Beech Avenue towards the site of the old 13th Century church of Barow, botanising as we went (no rarities but lots to see), and with fine views of Berwick Law, the Bass and Traprain, all three together. Unfortunately, the site of the church was too overgrown to visit – obviously a winter job. Soldier Beetles were everywhere, in pairs of course, and at one point we were regaled with the grisly sight of a dozen Fox carcasses hanging on a fence.

Luncheon found us by the loch. A pair of Mute Swans were sporting their large family of nine (no less) very large cygnets. Two Little Grebes were on the water, along with the usual Coot and Mallard. Although only a single Large Red Damselfly was seen, the banks of the loch were thick with untold numbers of the Common Blue Damselfly; some of us, including this writer, guessed that there were 1000s.

Stranger yet was the Comma Butterfly which adopted us for the duration of our lunch! This particular *Polygonia c-album* chose to land on a mud patch about 3 ft. from the nearest diner and there it remained. When disturbed it would return immediately to the same spot. Needless to say, it was comprehensively photographed from every angle.

The afternoon was taken up by a circumnavigation of the loch. On one open piece of grassland we encountered lots of butterflies including Ringlet, Meadow Brown and Common Blue. This was delightful to find in one of the most intensively farmed parts of the country. The Barred Straw Moth was also identified.

Returning back along the wooded side of the loch on the last stage of our foray all eyes were strained looking for the rare Wood Spurge, *Euphorbia amygdaloides* ssp. *amygdaloides* recorded from this site since 1965. Eventually it was not only found but found to be thriving and in some quantity.

And so back to our starting point. A rewarding day made all the better by the fine weather. Our thanks to the Younger family and to our leader George McDougall.

John Watson

RED MOSS OF BALERNO

Date 20th July
Leader Margaret Perry

Ten members gathered at Threipmuir car park for a tour of the Nature Reserve on a windy and rather cool evening. The Moss, one of the few remaining raised bogs in the Lothians has been formed over a period of 6000 years. Conservation of this raised bog is being carried out by the Scottish Wildlife Trust. It involves prevention of drainage and removal of invasive trees in an effort to retain moisture. However, we saw some evidence of drier conditions in the prevalence of the single-flowered Hare's-tail Cotton Grass *Eriophorum vaginatum*, and a fair number of Birch shrubs *Betula* sp. The vegetation forming the hummocks and hollows of the surface was a dense mix of the moisture-retaining Sphagnum mosses *Sphagnales* spp, also Bell Heather *Erica cinerea* in flower, Cross-leaved Heath *Erica tetralix* and Heather *Calluna vulgaris*. The light and dark green Sphagnums were numerous but the reds were not so common despite having the Reserve named after them. A rare array of the stalked brown capsules and fruiting bodies was noted on one of the Sphagnum hummocks. The damp hollows provided an excellent habitat for Sundew *Drosera rotundifolia*, the plants of which were so abundant that they added to the red tinges of the moss. A neat cluster of lichen *Cladonia* sp. was also found here. The bright red heads of the fruiting bodies on their long stalks have been likened to British soldiers, the common name of this organism in American texts. Other sightings of interest were some hundreds of black caterpillars of the Peacock Butterfly clustered on a large clump of Nettles, and two specimens of the bright green caterpillar of the Emperor Moth.

In full bloom along the roadside bordering the Moss were Marsh Ragwort *Senecio aquatica*, Yellow Rattle *Rhinanthus minor*, Ragged Robin *Lychnis flos-cuculi*, Meadow Vetchling *Lathyrus pratensis* and Meadowsweet *Filipendula ulmaria*. A curiosity was the growth of galls caused by the Gall Midge *Rhopalomyia palarum* or *ptarmicae*, on the flowers of the Sneezewort *Achillea ptarmica*. After a gentle ramble round the Moss, the evening was completed by a quick walk down the road to the Reservoir where two families of Tufted Duck were spotted in the gathering dusk.

Margaret Perry

SELKIRK RACECOURSE

Date 23rd July
Leader Jeff Waddell

Fifteen members of the Nats gathered in the car park near Selkirk Racecourse to await transportation to the racecourse area where parking is limited. We were treated to a display of Moths which had been caught by our leader, Jeff Waddell, in a Mercury vapour lamp trap set the previous evening in his garden in Galashiels. The moths included: Dark Arches, Burnished Brass, Garden Tiger, Swallow-tailed Moth, True Lover's Knot, Smoky Wainscot, Brown-line Bright Eye and Large Emerald. There was plenty of opportunity to study, enjoy and photograph the moths before they were released into the nearby scrub.

It had been hoped that a good variety of insects would be found on the meet, but the generally dull, though dry day was not conducive to flying insects. The meet contained a rich variety of different habitats. The first was a basin mire containing some interesting species including Knotted Pearlwort *Sagina nodosa*, Celery-leaved Buttercup *Ranunculus sceleratus* and Dioecious Sedge *Carex dioica*. Nearby a more eutrophic mire with much deeper peat produced Greater Spearwort *Ranunculus lingua*, Bogbean *Menyanthes trifoliata*, Marsh Cinquefoil *Potentilla palustris* and Water Horsetail *Equisetum fluviatile*.

After our lunch stop we moved to a different habitat that was characterised by grasslands on calcareous rock. Here we found Burnet Saxifrage *Pimpinella saxifraga* and Kidney Vetch *Anthyllis vulneraria*, but the item which caused most interest was the small white eggs of the Northern Brown Argus Butterfly which could be easily found on Common Rock-rose *Helianthemum nummularium*.

After a walk across mostly bracken-covered fields we reached another basin mire; this contained some very unusual species including Lesser Marshwort *Apium inundatum*, Least Bur-reed *Sparganium natans* and Marsh Pennywort *Hydrocotyle vulgaris*. On the adjacent grassy calcareous mounds Mountain Pansy *Viola lutea* and Mountain Everlasting *Antennaria dioica* were found.

We walked back to the racecourse, with an excellent sighting of a Yellowhammer on the way. The walk was not yet over, and one final surprise was in store for this rich outing. Jeff had said that there was an old record of Moonwort *Botrychium lunaria* on a knove near to the road, but it had not been found for many years. This was taken up as a challenge, and after a few minutes 3 specimens (one with a sporing stem) were found by the eagle eyes of the Nats. Around the Moonwort, large numbers of Field Gentian *Gentianella campestris* were coming into bloom and it was difficult not to disturb them while appreciating the Moonwort.

Our sincere thanks go to Jeff not only for such an interesting walk, but also for travelling down from Nairn to lead this walk for us.

Roger Holme

WATER OF LEITH

Leader Molly Woolgar
Date 27th July

It was a much cooler evening than during the previous ten days as we followed the Water of Leith towards Balerno. There was little likelihood of seeing or hearing much in the way of bird life so a fairly sharp short walk in the evening chill seemed in order, and Molly provided a commentary on the buildings and landscape features. Banks on both sides of the path were thick with growth. Butterbur leaves showed signs of rust; umbellifers of various kinds were in flower, for example, Hogweed *Heracleum sphondylium* (not the dangerous kind). An alien, a form of Giant Knotweed *Fallopia sachalinensis*, similar to Japanese Knotweed but with much larger, dock-like leaves, aroused interest. Some nice heads of Giant Bellflower *Campanula latifolia* were showing in colours varying from white through pale blue to a deeper blue. A white flowering Deutzia (a garden escape) was impressive on the railway. Thereafter, the main item of interest was the abundance of large grasses. Among those seen were Giant Fescue *Festuca gigantea*, Hairy Brome *Bromopsis ramosa*, Wood Millet *Millium effusum* and Red Canary Grass *Phalaris arundinacea*.

We retraced our steps after an hour and were within ten minutes of 'home' when the rain came on heavily.

Andrew Gilchrist

COUSLAND BING AND EASTER INCH MOSS

Date 30th July
Leader Jackie Muscott

When I did a quick recce a week before our visit I was surprised at how fast all the plants were going to seed, and rather hoped for some dull weather during the ensuing week. My wishes were granted, but I didn't bargain for rain on the day! A dozen hardy Nats braved the weather, and fortunately the rain had cleared up by lunch time.

We were aiming for a new cycle path (Route 75) which crosses Scotland, but had to start along the verge of the newly-named A779, noting the plants of Lesser Sea Spurrey *Spergularia marina* and Reflexed Saltmarsh Grass *Puccinellia distans* which have appeared on the verge as a result of salting. The cycle path led us over a small stream with an attractive and unusual grass Whorl Grass *Catabrosa aquatica*, and then passed some well-fenced off lagoons, where Coot, Little Grebe and a family of Tufted Duck could be seen, along with Swallows taking insects from the surface of

the water. Swifts were also in evidence and we were later to see Sedge Warblers and Meadow Pipits, while a Curlew was heard from time to time.

We veered off the cycle track and climbed the bing where we had lunch in a sheltered spot; despite the rain the ground was surprisingly dry. The bing is well-vegetated with tall herbs and grasses including Common Knapweed *Centaurea nigra*, Yellow Rattle *Rhinthus minor*, Kidney Vetch *Anthyllis vulneraria*, Yellow Toadflax *Linaria vulgaris* and Common Melilot *Melilotus officinalis*, along with smaller Clovers and Trefoils *Trifolium* spp. and Eyebright *Euphrasia* sp. After lunch we made our way down to the Easter Inch Moss, also very dry, where a number of interesting finds were made.

In the ditches and wetter places were Cottongrass *Eriophorum angustifolium*, Marsh Cinquefoil *Potentilla palustris*, Mare's Tail *Hippurus vulgaris* and Narrow Buckler Fern *Dryopteris carthusiana*, with Round-leaved Sundew *Drosera rotundifolia* growing on Sphagnum Moss. The most exciting finds however were a few spikes of Greater Butterfly Orchid *Platanthera chlorantha* and no fewer than 34 flowering spikes of Heath Cudweed *Gnaphalium sylvaticum* on one of the raised tracks. The Cudweed is not new to West Lothian, but I had only seen the odd spike in a precarious situation previously. Thanks to Roger on this occasion!

We returned by way of the cycle track, and added another interesting plant record, a small patch of Common Wintergreen *Pyrola minor* under trees by the track.

On the recce I had seen quite a number of Butterflies, but given the dull weather we were lucky to see a single Ringlet, a Meadow Brown and a Six-spot Burnet Moth. However other insects had left evidence of their passing, as we saw a number of insect galls: the gall caused by the midge *Rhopalomyia palearum* or *ptarmicae* on Sneezewort *Achillea ptarmica*, some splendid Robin's Pincushions, caused by the gall wasp *Diplolepis rosae* on a rose, and the tailenders saw the large nut-sized galls of the sawfly *Euura amerinae* on Bay Willow *Salix pentandra*.

The Bay Willow is a very handsome small tree with very shiny foliage, which is also very fragrant in the spring. Not only does it have its own private gall maker, it also has its own rust, not found on other Willows. The rust *Melampsora larici-pentandrae* was present in such quantity on some of the leaves that they were turned bright yellow. A number of other rusts were present, including *Coleosporium tussilaginis* which was not only infecting Coltsfoot *Tussilago farfara* as its name suggests, but also Yellow Rattle and Eyebright. It has numerous other hosts. The most interesting parasitic fungus, however, was *Taphrina alni* (*amentorum*) which infects the female catkins of Alders *Alnus* spp., the fruiting bodies growing like red tongues out of the green cones; they could be seen on a number of the young Alders which had been planted in the area.

It was too dry for most of the larger fungi but we did see an attractive specimen of the Tawny Grisette *Amanita fulva* under some trees, and Mary Clarkson found a Waxcap, *Hygrocybe helobia*, in some wet grass.

Altogether there was quite a variety of interest.

Jackie Muscott



Tawny Grisette
Amanita fulva

TIBBIE SHIELDS CIRCUIT

Date

August 6th

Leader

Neville Crowther

It is always a longer drive than expected from Innerleithen southwards. Despite the distance, about twenty folk gathered for the walk at the James Hogg Monument. I was impressed that collectively quite a lot was known about Hogg's life and some people even were able to peel back the years and quote poetry learned at school.

The excursion followed the Southern Uplands Way towards Moffat for the first 3 miles and although mostly uphill, it was a smooth path. Lots of exposures of Silurian shales by the track allowed much initial enthusiasm to be devoted to searching for Graptolites, as this is a well known locality for these fossils. They proved a more elusive quarry than most had thought, but Thyme *Thymus praecox*, Harebell *Campanula rotundifolia* and Rock-rose *Helianthemum nummularium* may have been a compensation.

The track was flanked by over-grazed acid grassland with large encroaching stands of bracken and damper rush pasture. Our interest was stimulated by family parties of Stonechats and Wheatears as well as the ubiquitous Meadow Pipits. Botanically the variety was enhanced by frequent flushes producing patches of brown *pleurocarpous* mosses, peppered by a variety of sedges including Carnation *Carex panicea*, Yellow C. *viridula*, Flea C. *pulicaris* and Star C. *echinata*. Other notable vascular plants also indicative of calcareous enrichment were Quaking Grass *Briza media*, Grass of Parnassus *Parnassia palustris*, Self Heal *Prunella vulgaris*, Lesser Clubmoss *Selaginella selaginoides*, Marsh Arrowgrass *Triglochin palustris*, Fairy Flax *Linum catharticum*, and Marsh Lousewort *Pedicularis palustris*.

A diminutive cleuch woodland, suggesting the floral cover of previous centuries, had a remarkable variety of shade plants such as Wood Cranesbill *Geranium sylvaticum*, several ferns and Wood Sorrel *Oxalis acetosella* beneath the canopy of Hazel *Corylus avellana*, Sallows *Salix* spp., Birch *Betula* spp. and Rowan *Sorbus aucuparia*. A little further on John

Watson spotted the first of several Scotch Argus Butterflies *Erebia aethiops* which although seen often in our bigger mountains is only recorded from a few localities in the Border Hills. A small blanket bog at the top of the hill had a fine display of Bog Asphodel *Narthecium ossifragum* and Sundew *Drosera rotundifolia*, but driven by lunch hunger we were soon heading down to the bridge over the Whithope Burn.

After relaxing in the sunshine by the babbling water it was a hard pull to the ridge of Pikestone Rig. On the unseasonably dry summit bog we turned west and descended towards the Loch of the Lowes. Andrew discovered one adult of the now rare Dark Green Fritillary *Argynnis aglaja*, on the flanks of Peat Hill. The Millennium Butterfly Atlas suggests it could be a new 10 km. square.

Some found it difficult going over the last mile or so. Going downhill, the path had been hidden by bracken and rushes. However the sun continued to shine, although darkening skies only threatened. Our timing on the weather was fortunate, as it began to rain before most of us had driven past Traquair and crossed the Tweed.

Neville Crowther



Where's Joanie away to ??

CALDER WOOD

Date 13th August
Leader John Watson

After heavy overnight and early morning rains, and with the forecast being much more of the same it was gratifying to see such a fine turnout at the venue. As it transpired there was only one (heavy) shower and thereafter it turned out to be mainly dry, warm and sunny.

First port of call was the site of the former shale mining village of Oakbank. Built in 1864 and with a peak population of 1000 souls, the village was completely demolished in 1984. Nothing remains save the Social Club building. The shale industry

itself came to an end in 1962 and the oil works, which was the reason for Oakbank's existence, is also long gone. Later the group were to see the site of the mine at Mid Calder which supplied the raw shale to Oakbank.

The area has now been converted to Community Woodland and Grassland with good access for the public. Wildflower seeding is much in evidence, with acres of Lupins, Salad Burnet *Sanguisorba minor* ssp. *muricata*, Red Bartsia *Odontites vernus*, Hardheads *Centaurea nigra* and various clovers.

After leaving Oakbank our route followed the Linhouse Water along a riverside path to Mid Calder stopping en-route to admire a local beauty spot where a small waterfall tumbles into the river gorge. The gorge also gave good exposures of the local rocks – mainly shales and sandstones.

Interestingly, Red Tongue Fungus *Taphrina alni* (*amentorum*) was spotted on some Alder cones. Lunch stop was at the Gasworks Brae in Mid Calder. Fortunately the gasworks have been gone for many years. This area, now in West Lothian, was formerly part of Mid Lothian and previous to that it was in Edinburghshire!

First port of call in the afternoon was a small but productive pond. Here we found Dragonflies: a Male Common Hawker *Aeshna juncea* on patrol, as well as Common Darters *Sympetrum striolatum*. Common Blue *Enallagma cyathigerum* and Emerald *Lestes sponsa* Damselflies were also present.

From here the route followed the opposite bank of the Linhouse Water, through a sea of Bracken to the A71. Using the underpass we made an hour's side-trip into Linhouse Glen and thence back to the car park.

The warmth of the afternoon made for good insect hunting (camera shooting only). Finds included the Spiders *Tibellus maritimus* (often found inland) and *Zygiella (stroeni ? difficult)*; the Moths *Udea lutealis*, no common name, *Scotopteryx chenopodiata*, Shaded Broad-bar *Autographa gamma*, Silver Y, *Camptogramma bilineata*, Yellow Shell and *Noctua pronuba*, Large Yellow Underwing. One interesting caterpillar defied identification and appeared to be a variant of the familiar Fox Moth Larva. Butterflies seen were Meadow Brown, *Maniola jurtina*, Ringlet, *Aphantopus hyperantus*, Small Tortoiseshell, *Aglais urticae*, Peacock, *Inachis io* and, of course, Small White, *Artogeia rapae*.

It was an interesting walk in that it was new ground for many present, and it was good to have a day which overturned the gloomy forecast.

John Watson

ABERLADY

Date 20th August
Leader Bill Clunie

It was a perfect summer day, warm, skies blue with the odd fluffy cloud, ideal for a visit to the seaside. Eighteen members assembled for Bill Clunie's outing on birds, though three detached themselves early to wallow, botanically speaking, among the coastal vegetation.

The first part of the day was spent walking towards Aberlady village, but, with the tide fully out, there was little bird life to be seen beyond the most common shore dwellers – Heron, Redshank, Oystercatchers etc. Returning to the bridge we made our way fairly rapidly towards Gullane Point. On the Marl Loch it was interesting to watch Common Darter Dragonflies *Sympetrum striolatum* in tandem, laying eggs on the surface of the water. Walking further, a number of Butterflies were seen: Common Blue, Small Heath, Small Copper, Peacock and Red Admiral. On the ground, Grass of Parnassus *Parnassia palustris* and Field Gentian *Gentianella campestris* were plentiful.

The bird life became more interesting around lunchtime at Gullane Point when the tide was rising fast. On the rocks were Cormorant, Golden Plover and Turnstone while further out, Bill espied a Red-throated Diver. The way back was via the beach when various waders, mainly Grey and Ringed Plover as well as Sanderling and Dunlin were noted. Among these, there was also a flock of Terns.

With such wonderful weather it was a joy to be out, and with Bill finding forty species of birds, it was obviously a great success from the point of view of natural history too.

Andrew Gilchrist

BATS at LINLITHGOW

Date 24th August
Leader Natalie Taylor

Never mind Bats in the belfry, this was Batty Nat in the tower at the Palace; sounds a bit like Cluedo doesn't it, although the ghost of Mary of Guise didn't show herself! It was a beautiful evening with just one short sharp shower; the wind had died down and the sun was setting over the loch. Natalie introduced us to Martin Gray, the resident Historic Scotland Ranger at Linlithgow.

Martin let us into the Courtyard, using the massive old key. He explained the scaffolding on the north wall - a piece of lintel had fallen a few days prior to our visit, during a wedding, fortunately not injuring anyone; this despite regular masonry checks. The

scaffolding was erected within 24 hours of the incident. At the centre of the courtyard is the magnificent King's Fountain, in the Gothic style and decorated with literary motifs from the tale of *The Little Mermaid*. The fountain has many carved heraldic emblems and figures, one of which is said to depict King James V dressed as the peasant 'gaberlunzie man'. It was built during the reign of James V (about 1538), taken from a date on the lead water pipes from the Kirkgate in the town. On the occasion of his wedding to Mary of Guise, it is said to have flowed with wine instead of water.

We were also told a bit about the fountain's recent restoration, completed this year, and costing £0.75m. It was restored in Bath, with stone from a quarry near Leeds, and using mortar and special glue. One statue was damaged in transit back to Linlithgow and had to be remade, and one was split in the final sanding process. The base concrete blocks used in an earlier restoration, had been reinforced with steel, and one person was hurt when drilling the blocks out during dismantling.

And now for the subject of our visit - Bats. I had not seen Natalie's demonstration of the bat wing (order Chiroptera = hand wing) with her gloved wing contraption, but it demonstrated the point very well. Physically very like us, the bat's 'thumb' is more agile to help crawl, and the wrist more supple. Their toes are naturally clenched in the resting position, and they only relax the toes to fly.

The smallest bat in the world, the Bumble Bee Bat, weighs one penny. The largest, the mega-Chiroptera, or fruit bat, is the Java Fruit Bat which has a 5' 6" wing span, Natalie's height. Bats will take fish, birds, insects, nectar, frogs and blood. They are pollinators of bananas, figs and the blue agave plant (*Agave tequilana*) - tequila.

There are eight species of bat in Scotland, five in the Lothians. Feeding on insects and taking 3,000 midges per bat per night, you could be forgiven for thinking there is no need for anti-midge products! By and large bats do not carry disease. However antibodies of the *lyssa virus* (rabies) or EBL2 were found in two populations in Angus. The only way the virus can be transmitted is if saliva gets into the blood stream, or is transmitted through kissing and gets into the mouth, or is spat in the eye or up the nose. Much as I like bats, not enough to kiss one! In the Lothians, we have summer and nursery roosts, and occasionally winter roosts. Pipistrelles fly about half an hour after sunset and Daubentons 1 hour after. There are many different sounds heard on the bat detector, using echo location - 9 clicks per second on the downbeat; feeding - a 'raspberry' sound; and social calls. Sounds vary, some can be 'clicky' and some 'clappy'.

Daubentons are recognised by their white tummies, different shape and size of droppings, and they are specially adapted to feed over water. The Pipistrelle has now been split into two species, the 45 and the 55,

depending on the frequency of the clicks. Of the two, the 55 is more common in Scotland and is the one often found round houses in residential areas.

We were rewarded with seeing lots of Pipistrelles flying round the courtyard, and watching and listening to (without the aid of a bat detector) Daubentons at roost, clinging onto the walls. We then took a brief walk down to the loch-side. Darkness was almost upon us; I had hoped for a photograph of a bat flying across the now rising and spectacular orange moon, but unfortunately that will have to wait till another time!

It was a wonderful evening, and my thanks go to Natalic and Martin for their time. I'll be there next year.

Joanie Fairlie

Gaberlunzie is old Scots for a tramp or wandering beggar.

STOBO CIRCUIT

Date 27th August
Leader Munro and Frances Dunn

The walk started at Stobo Kirk which has parts dating back to the 12th century, and the opportunity was taken to have a quick look at this while drivers were being ferried.

Much of the initial track up the Easton Burn was lined with tall upright Oaks, possibly dating from the 18th century, and before we emerged onto upland pasture we passed a majestic Black or hybrid Poplar. Whinchats, Jays and Buzzards were in evidence. Lunch was taken on a wooded bank, sheltered from light rain on an otherwise dry but cloudy day. Some people ascended to a viewpoint.

The return route above the Weston Burn and its two artificial lochs yielded nothing botanically exciting, but among other things New Zealand Willowherb, Gipsywort and the fungus Slippery Jack were spotted. Other fungi most frequently seen were various Russulas and the Larch Boletus. Finally the route led through the scenic streamside gardens of the castle, now a health spa.

Munro Dunn

DOUNE PONDS

Date 3rd September
Leader Janet Watson

The Red Kite was the highlight of the day, but our morning visit to Doune Ponds was also an extremely interesting part of the day's excursion. Here we ambled along a path through an area of deciduous and coniferous woodland surrounding a lochan, making interesting discoveries all along the way. This lochan

was one of those peaceful, tranquil spots completely enclosed by trees, which gave it an air of remoteness. A beautiful spot! Just the place to come for soothing relaxation.

One would never have imagined that the lochan was actually the site of a quarry which opened in the 1940s and closed in the early 1970s. Raw materials of sand and gravel came from here for bridges, roads and buildings. Kincardine Power Station and Grangemouth Oil Refinery were constructed with Doune aggregate.

The material that used to be quarried here owes its presence to a process which took place during the last Ice Age. At that time the land was covered by massive ice sheets, but rivers of meltwater flowed deep down under the ice eventually emerging to form rivers. At this point, over many years, quantities of silt, sand and gravel which had been carried downstream from the frozen highlands were deposited.

There was a small amount of wildlife on the water - Mallards, a Swan with cygnets, a young Moorhen. In one corner, we saw 6 cygnets, 3 of them upending in the water.

In a very large clearing fairly near the lunch stop, there were the delightful colours of Eyebright *Euphrasia* sp., Common Centaury *Centaureum erythraea* and Marsh Cudweed *Gnaphalium uliginosum*. Robins entertained us with their songs during our lunch beside the lochan.

Now here are the stars of the walk in the woods, which I have kept till last because they were so special. Fungi upon fungi! It was quite amazing! A real treasure trove! I noted down 14 different species, all shapes and forms some with attractive patterns of rings on the top, one or two quite delicate looking. Two were particularly outstanding:

- (1) Lilacscale Milkcap *Lactarius spinosulus* This is uncommon. A main characteristic of the *Lactarius* group is that they exude 'milk' or latex when the flesh is cut or bruised.
- (2) Blushing Bracket *Daedaleopsis confragosa* with its whitish pores, which bruise to red on handling, was found on a Willow trunk.

Didn't we do well !

.....AND THE AFTERNOON

What a thrill and how excited we all felt at seeing the splendid Red Kites at the Lerrocks Farm feeding station of Ardgaty Red Kites, situated 2 miles north of Doune on a twisting, ascending, rural road, amongst the foothills of Highland Perthshire. They gave us a wonderful display, showing us what magnificent birds they are, as they swooped from the sky across the ground to pick up the food, skilfully taking it away in their talons. At one point there were 3 or 4 appearing across the ground in quick succession - a most awesome and stunning sight.

We were shown 3 feathers from different parts of the bird's body, including the wings. They showed a fantastic pattern of colour.

Illegal poisoning in 2004 was confirmed in 12 instances but the good news is that it is declining. Poisons e.g. rat poisons are used to kill other animals, and are not necessarily directed specifically at Red Kites. But as Red Kites are scavengers, they may accidentally eat poisoned carcasses.

At the feeding station we watched the Kites collecting the food set out in the field for them. The Red Kites and another bird of prey, the Buzzard, demonstrated some fascinating insights into bird behaviour, ecology and adaptations. We also learned about the tagging system used to monitor the Kites. I have recorded the information I have learned in the article on Page 18.

At one point there was the rather unusual spectacle of a Red Kite sharing a pole with a group of Crows, each species being not the least bothered by the presence of the other. An interesting sideshow illustrating mobbing behaviour occurred when we saw a Sparrowhawk being mobbed. For all their power, birds of prey do not always have things their own way! Changing weather patterns seem to have been a major factor in the year, adversely affecting the Barn Owl, Kestrel and Vole populations. As Voles are part of the food chains, a bad year for them would have a knock-on effect on their predators.

It was a fascinating visit. To sum up the excursion we had a great day and managed to pack a lot into it. Really two excursions in one day.

ACKNOWLEDGEMENTS: For confirming, clarifying facts and supplying extra information, my thanks to all at Ardgatay Red Kites.

Roddy Clark

THE HERMITAGE, DUNKELD

Date 10th September
Leader Lyn Blades

For those of us travelling from Edinburgh, our journey took somewhat longer than expected on this Saturday morning. First of all we met queueing traffic at J2 on the M90, then a diversion south of Perth meant that we had to negotiate Friarton junction by a more complicated route than normal. Once all of those expected had arrived, the remainder of the day went more or less according to plan.

We met at The Hermitage, on a dry if somewhat chilly morning, and set out to 'follow the little green man' - not a fairy being, but simply the NTS waymarking of the Braan Walk.

The first part of the walk is through the sheltered woodland of The Hermitage, where some of the

Douglas Firs are amongst the tallest trees in Britain. The path follows the river to Ossian's Hall, once the centrepiece of a wild garden, built by the son-in-law of the second Duke of Atholl in 1758. If the time is right and there is enough water, this pavilion is the place to watch salmon leaping up the lower waterfalls of the River Braan. We were in luck; some salmon were struggling upriver and we wondered at the energy they must expend in often-repeated attempts. It is also a special place for two of our group, who celebrated their wedding here seven years ago - almost to the day!

Nearby a wet muddy area, carpeted by a small green plant was a puzzle on the recce. This proved to be 'a nasty' - New Zealand Pygmyweed *Crassula helmsii*, which is grown by aquarists and discarded. It is now well naturalised and spreading rapidly; how it reached The Hermitage is anyone's guess.

Higher up in the wood I found myself ahead of the group (pacesetting!), on my own apart from the first Red Squirrel of the day. It was sitting at the foot of a Pine, by the edge of the path. Unfortunately as two walkers approached it ran up the tree and disappeared in the canopy.

Coming out from the top of the woods onto open hillside, we stopped for lunch by a large boulder. This provided some shelter from the chilling wind and from it we had good views of the surrounding countryside.

Our next stop was at Rumbling Bridge, where the upper waterfalls and the deep chasm below are quite spectacular. Here some people looking down on the falls had eye contact with a Red Squirrel which was using a fallen tree as a bridge across the river. Shortly afterwards we had a sighting of our third Squirrel of the day, on bushes near the river.

The checklist of the Plants of Perthshire records Betony *Stachys officinalis* as very rare, and Rumbling Bridge as one of three sites. The leaves were there and a bit further along our route we found a few plants still in flower. Near the edge of the wood beyond Rumbling Bridge, flowers of Orpine *Sedum telephium* were spotted.



Red Squirrel using a fallen tree as a bridge across the river

Next we walked on a track through open moorland until we reached Tomgarrow Wood. In the early 18th century the hamlet of Tomgarrow contained a large community, growing, spinning and weaving lint, or working in Birnam's slate quarries. Now only a few ruins are visible. Having gone through the mixed woodland we were into the Ladywell conifer plantation, where stripped cones of Spruce and Pine are evidence of the presence of Red Squirrels. Though it was too late in the year to find many flowers, a variety of Sphagnum mosses provided a beautiful spread of colour on the bank by the side of the track. Lower down many plants of Heath Cudweed *Gnaphalium sylvaticum* were flowering. Not as exciting a find here as it was in West Lothian, but pleasing to me as this was where I first saw it 20 years ago!

Across the road at the Inver car park and we were into The Hermitage again, on a path leading back to Ossian's Hall. This rather dark, and in places damp route through the trees is good for ferns, including Oak *Gymnocarpium dryopteris* and Beech *Phlegopteris connectilis*.

Everyone arrived safely back at the car park after an enjoyable walk.

Lyn Blades

PORTMORE LOCH FUNGUS FORAY

Date 17th September
Leader Mike Richardson

In spite of the weather being rather dreary and overcast, there was a very good turnout for this foray. It is a long time since the Nats last visited the Portmore area so it was fresh ground for the majority. There is always a good turnout when Mike Richardson is the leader as he has the gift of enthusing those round him without frightening the beginners. The grounds around Portmore Loch are well wooded, with considerable variety, and with trees of all ages. Thankfully from our point of view, rotting trunks and branches have been left on the ground.

Up until this date fungi had been disappointingly few in and around Edinburgh, but no sooner had we parked beside the Loch than we could see that there was no shortage .. The foray started in the Beechwood by the car park where all those associated with Beech were plentiful - *Lactarius blennius*, *Russula mairei* and *R. fellea*. From the Beech wood the group moved through a more mixed area but dominated by Birch. A number of common species were collected here. A forest road now led past conifer and Beech as well as Oak, to a junction where large tree trunks lay conveniently placed for our lunch stop. As the party had been quite scattered until then, Mike was now swamped with all the unidentified finds and barely given a chance to eat his lunch.

After the break the group continued along the forest road through conifers to a more open grassland area where there are remains of fortifications, North Shield Rings. Some people saw Fallow Deer fighting among the trees nearby. The return route was through the woods making a circuit back to the car park where Mike identified more of the collections.

The Beech, Birch and conifer woods had all produced a number of expected common species, but the open grassland near the fortifications was disappointing. The final list of the day was quite long, and as always, produced a few *Inocybes* and others which are in this world to try us.

Elizabeth Farquharson

BARON'S HAUGH
Date 24th September
Leader Ian McCallum

This is an account of a combined outing of the Glasgow Natural History Society and the Edinburgh Natural History Society to the RSPB Reserve of Baron's Haugh, which lies beside the River Clyde near Motherwell. The Reserve comprises more than 100 hectares of good mixed habitat and has had over 170 recorded bird species.

The party which comprised 12 Edinburgh members and 6 Glasgow members, met up about 11.00 o'clock, in the reserve car park, on a fine sunny day. There was also a dog. If it had been a collie it might have managed to keep the party together.

The party started at the Marsh Hide which is normally very productive. However, it proved to be disappointing - possibly due to the local Peregrine having paid a visit prior to our arrival. It was from this hide the previous day that Ian had watched the elusive Spotted Craik. Unfortunately, on the day of the outing it did not show. The route which was clockwise round the Haugh, via the White Walk, took us along the edge of Dalziel Wood, which had the most northerly breeding Nuthatches this year. In the wood a late Chiffchaff was calling.

Where the path crosses the Dalziel Burn, Butcher's-broom *Ruscus aculeatus* was growing. One of the party explained that the Broom had reputedly been used for scrubbing down butcher's chopping boards. Nearby was a specimen of the Tulip Tree *Liliodendron tulipifera*. At the bottom of the Chestnut Walk next to the graveyard, Oak trees were examined: Turkey Oak *Quercus cerris* and the rarer Scarlet Oak *Quercus coccinea* with its odd shaped acorns.

At the River Clyde it had been planned to walk upriver to Carbarns Pool for lunch, but as the time was running out, the party continued to the Centenary Hide.



Scarlet Oak
Quercus coccinea



Turkey Oak
Quercus cerris

From the hide there was a good selection of both duck and waders including a female Pintail, Knot, Shoveller, Teal, Wigeon, Mallard, Redshank, Cormorant, Dabchick, Heron, Lapwing, Mute Swan, Gadwall and Snipe.

Other birds which were seen were Buzzard, Kestrel, Wren and Swallow.

Because it was a breezy day dragonflies and butterflies were scarce although a Small Copper Butterfly was seen in the car park.



A wee Wren

After lunch the party continued round the loch to the Phoenix Hide and then onto the Causeway Hide where the lucky members of the group had a glimpse of the elusive Water Rail.

The party returned to the car park about 3.30pm prior to going on their various ways.

Ian McCallum

WOOLAW

Date 8th October

Leader Neville Crowther

A year ago many of us had an exciting time on a night time moth trapping excursion at Woolaw Community Woodland, near Stow, led by Jeff Waddell. As a consequence of this visit, Jon Mercer from the Harestanes Biological Record Centre asked us to come again, with the object of providing a fungal species list for the woodland.

In mild and initially damp weather over 30 people assembled at the car park, including about seven from the Borders attracted by local publicity. We followed well groomed pathways throughout the site, particularly appreciated by Elizabeth. Initially much of the site had been a Spruce plantation, but after much clearance had become self-seeded or had been planted up with many native trees.

False Chanterelle *Hygrophoropsis aurantiaca*, Sulphur Tuft *Hypholoma fasciculare* and Brown Roll Rim *Paxillus involutus* were almost overwhelmingly numerous, but such numbers allowed us to demonstrate the variability of a species to new observers. Beneath the many mature Beech trees we found *Amanita fulva* in some numbers, the expected Russulas, *R. mairei* and *R. ochroleuca* and half a dozen species of Milkcap. *Lactarius glycosmus*, with its coconut fragrance became easily the quickest to be identified. A very large and old fruiting body of the Ugly Milkcap *L. turpis* was unforgettable. Together with felled Beeches, the Spruce brushings, logs and stumps provided an abundant substrate for many 'brackets' and other saprotrophic fungi such as *Calocera viscosa*, *Stereum* spp., *Gloeophyllum sepiarium* and *Trichaptium abietina*. Pretty and unusual but quite numerous were the translucent jelly-like fruiting bodies of *Pseudohydnum gelatinosum* which as its name suggests, only resembles one of the Tremellales and has a hymenium of blunt spines. On the paths we found trooping groups of the Glistening Inkcap *Coprinus micaceus* in various stages of autolysis, and many deep brown cups of *Peziza badia*.



Sulphur Tuft
Hypholoma fasciculare



Brown Roll Rim
Paxillus involutus



Calocera viscosa,

We were delighted to hear that the Barn Owls, which we watched carrying prey to a nest box a year ago, were again successful. The two juveniles, which were now flying, were still in the vicinity, being fed by adults.

We had lunch in an area well used as a community meeting place with picnic tables & barbecue sites. A mass attempt at identification was made quite successfully afterwards, before continuing our walk to areas not yet seen. The grassland was not productive and only yielded the Purple Anther Smut *Ustilago violaceae* on Lesser Stitchwort *Stellaria graminea* and, discovered by Jackie, Ergot *Claviceps purpurea*. On this occasion the Ergot was on Timothy, *Phleum pratense*.

Our final meander was to a belt of Beech trees on the south edge of the site where a simple slab marks the grave of Tim Stead of Lauder, wood carver and furniture maker. With others, his vision led to the establishment of the woodland. A standing carved tree trunk of Tim, bearded and Assisi-like, stands sentinel over this legacy.

Neville Crowther

SALTOUN

Date 22nd October
Leader Excursion Committee Members

Unfortunately the weather put paid to our walking from Pentcailtland to Saltoun on the old railway line. It was a very different Saturday morning from that of the previous week, when a recce took place in lovely autumn sunshine. By the time we met it was raining steadily, so our contingency plan came into operation.

We moved to the car park at Saltoun Wood, and from there eight stalwart Nats set out on the longer of the waymarked trails. The path led us on a pleasant if somewhat damp walk through contrasting areas of woodland.

We started off in the conifer plantation, mainly of Sitka Spruce, and after a bit came out into an open area. Here the conifers had been felled, and young native broadleaf trees planted. Then back again into conifers for a short distance, until we reached the mature broadleaf trees beyond - Birch, Ash, Chestnut and lots of Beech in their lovely autumn colours.

A few fungi were found but nothing of great rarity value as far as we could tell. Devil's-bit Scabious *Succisa pratensis* and the occasional stray flower on other, by now very straggly plants provided some colour.

Birds were keeping a low profile on this damp morning. We heard Pinkfoot flying over, and later heard and then saw a Great Spotted Woodpecker. Joanie heard Goldcrest and spotted Goldfinch towards the end of our walk.

Lyn Blades

AND A LATE ARRIVAL

It was pouring with rain and I was very late. By the time I got to the car park everyone else had gone, so I set off along the old railway line to Saltoun hoping to catch up. There were lots of hips and haws in the hedgerow which had attracted flocks of Blackbirds, Redwings and Greenfinches (the latter mainly after the hips), while several skeins of Pinkfooted Geese flew noisily overhead. There were quite a few plants still flowering, the most interesting being a patch of Crown Vetch *Securigera varia* near the Saltoun end of the track.

I returned the same way and was rewarded by a closeup view of a couple of Goldcrests accompanying a flock of Tits. I never did see the rest of the party. Apparently they all went to Saltoun Wood, so I was the only one who did the walk!

Jackie Muscott

DALKEITH OAKWOODS

Date 19th November
Leader Mike Walsh

It was a clear frosty morning when we set off in four cars across Dalkeith Parkland to the Oakwoods. Some 12 brave members of the ENHS followed a rather indecisive leader into the unknown. We motored to the woodland edge, the theory being that it was better to start within the woods rather than walk through well stocked fields, but the tactic minimised the overall distance for a rolling arthritic knee. Having parked the cars in the field, we scrambled out and through a muddy holding pen into the woods proper – more a woodland pasture than a serious wood, but lightly stocked with fine veteran open-grown Oaks. The trees are estimated to range from around 150 to 500 years in age, with most in the upper bracket. A sure method of course would be to make an accurate measurement of the rings from a veteran wind-blow casualty. It is in all probability an ancient wood, always having had trees on the site, but disturbed by man from time to time.

Heading south towards the River South Esk the group noted the lack of any noticeable pathogens on the trees despite their great age, which in some respects confirm the Oaks successful strategy as a pioneering species. It is well known that the species provides nourishment for some 300 other life forms. We saw *Ganoderma applanatum* (or *adpersum*?) on one Oak. Abundant Blackcaps and Jackdaws, with flocks of Chiffchaffs were skirting about, but we missed the Green Woodpeckers which make use of the grazed pasture. Roe Deer populate the wood, with abundant Grey Squirrels which are controlled by the Estate.

The open pasture was surprisingly sparse for unusual species, probably as a result of the stock disturbance. Apparently the management objective is to continue this regime, although it seems to be at odds with the natural regeneration of the woods. It was noted that there seemed to be a narrow age spread, and that most trees were aged veterans, with few if any middle or younger trees. Very few Oak seedlings were found, probably as a result of the thick grass sward and the irregularity of good seed years. To offset this, the Estate collects acorns and propagates them in a nursery for planting out in cages throughout the woodland. However it is known that, in Oak, seed production declines after about 180 years, so there is not the distress-seeding that some conifers display towards the end of their life. No advance regeneration was discovered! Yet even aged-ness is a function of some natural disaster or manmade intervention. Discussion ensued and it was thought that regeneration of this woodland could be greatly assisted by providing more areas of bare soil in good seed years.

Some of the group noted that the majority of these Oaks displayed a forked form and that they may be genetically related. The stock answer however suggested that the trees growing here were the remnants

of Oaks that were harvested when the Great Michael warship was built around the 1500s. Apparently, the forest was managed by Benedictine monks who came originally from England around 1400. The trees most suited to ship-building were therefore felled and the forked specimens, being less desirable, were left. This is probably a more plausible explanation. (For another theory, see postscript)

After a pleasant amble that only the ENHS can achieve, we arrived at the veteran of the veterans almost at the confluence of the rivers. A fine *Quercus robur* ! The leader however is not happy with the field identification, believing that there is much hybridising between *Q. robur* and the Sessile Oak, making winter identification awkward.

We had a short halt (standing) in a sunny glade bordering the North Esk, but the onset of cool air and darkening sky prompted a speedy return to the cars.

Small fenced-off areas of mixed hardwoods stocked with seedlings brought on by the estate from collected acorns were noted. This is a trial to enrich the woodland with local stock. The ruins of Newton Collegiate church were passed. They are worthy of more investigation. It apparently is very early.

We saw Roe Deer, but no Kingfishers which live on the water nearby. We discovered a hummocky area on the way back to the cars and several species of fungi. There had been frost earlier in the month and that made the identification of fungi particularly difficult. However, two species of *Mycena*, *pura* and *galericulata*, were identified, and a fungus noticed on the grass-covered humps was tentatively identified as Honey Fungus *Armillaria mellea*. This suggests that the humps actually covered the roots of dead trees.

No viable explanation came forth for the unusual landscape feature atop a moderately level glaciated surface. This may have been something left over from the last war, when the area was used for training.

We arrived back at the cars intact at around 3pm having made full use of a bright frosty autumn day. It is a salutary thought that this short walk, with its peace and wildlife, may never be the same once the Dalkeith bypass is constructed next year.

Mike Walsh

POSTSCRIPT

After the interesting visit led by Mike Walsh to Dalkeith Oakwood, the abundance of ‘twin-trunked’ trees (i.e. those co-dominant from just above ground level) resulted in theories as to how that growth had occurred. A conjecture is that these trees were encouraged to grow in that form so that the result would generate a strong conjoined trunk which could later (much later!) be used for building works which required a strong unjointed wooden bend. One instance is that of a ‘cruck’ cottage.

Few of these buildings remain but one in the small village of Torthorwald in Dumfriesshire has been saved from demolition and restored.

However if this speculation is to have any substance the question remains as to how the "twin-trunk" was created as it is surely unlikely that so many trees would have grown in that form naturally. One answer (which may not be feasible) is that grazing animals nipped the young leading shoot early in its life and so two new ‘leaders’ emerged and remained untouched. Another is that man intervened and nipped out the leading shoot deliberately. Each of the latter would have then required any grazing animals to be excluded from the growing area - not really probable so many hundreds of years ago. A more likely explanation is that two acorns were planted closely side-by-side so that as the young trees developed their tissues fused together and formed in effect one basal trunk.

If any of this speculation holds substance it would indicate more forward thinking regarding the environment and working with nature than is usually demonstrated at the present day.

Eunice Smith

RIVER ALMOND

<u>Date</u>	28th December
<u>Leader</u>	Janet Watson

Fourteen members met at Silverknowes in bright but cold weather, and looking at the sparkling sea we could only congratulate ourselves that we live in a city with such beautiful and diverse scenery. Proceeding along the promenade towards Cramond required considerable care owing to the icy conditions, but the path up the Almond was easier. We watched a bedraggled-looking Heron at the waterfall, but another one posed high up in the trees caught by the sun, and was snapped by various new digital cameras, as were many common woodland birds, but a Dipper was too fast in flight. Two pairs of Goldeneye were also on the river. The main party walked as far as Cramond Brig, before returning via the same route, to be met by an excited Joanie Fairlie and Alistair, who had just spotted an Otter, which caused great excitement and a lovely way to end 2005. It is marvellous actually to see them in our local rivers. The writer once saw one in Colinton Dell. We were not able to linger for long, as we had booked a late lunch at Lauriston Farmhouse, but we did stop to watch a very active Little Grebe at close quarters. Not all on the walk stayed for the lunch, but others joined us and we were a party of nineteen, which gave a festive meal.

Janet Watson

Isle of Mull



WHITE-TAILED EAGLES AT LOCH FRISA - Monday

Driven to extinction over 100 years ago, White-tailed Eagles were successfully re-introduced to Scotland during the 1970s, thanks to the support of Forestry Commission Scotland, RSPB Scotland, Scottish Natural Heritage and the Mull & Iona Community Trust, along with many dedicated volunteers and the Police. The White-tailed Eagle nests are now protected 24 hours a day. This has led to a reduction in illegal disturbance of the Eagle nests and to the continued breeding success of White-tailed Eagles on the Isle of Mull. There are now over 30 pairs of White-tailed Eagles breeding across Scotland - the highest total since re-introduction began in 1975.

On this the first day of our long excursion on Mull, with the sun blazing down after a pouring wet Sunday, we were met at the forestry track road end by Steve Irvine of the Forestry Commission, and were led the three miles or so to the viewing hide, which provides unique and spectacular views of the Eagles against the beautiful backdrop of Loch Frisa. We set off in convoy, 8 cars with 32 people, quite a gathering of Edinburgh Nats! On arrival, we got out of the cars and walked a wee way down the track to the hide. There the Eagles were pointed out to us, if we couldn't already see them, a quite spectacular view, both parents sitting posing for us in the treetops, visible to the naked eye, but better seen through telescopes. We saw the nest, but not so easily. The chick was well hidden, but we did manage a few glimpses. Of course, the parents weren't just sitting around all the time, although they are well known for their laziness. We had a lovely view as the male took off, flew over the loch, along the ridge of the hill and down out of

sight over the other side; then the female decided to fly to a sunnier spot, the sun having moved round a bit, and she picked another tree closer to the shore of the loch. Oh boy!



But the day was not devoted totally to White-tailed Eagles. Although we were watching them for the best part of three hours, there were other birds around putting in appearances and not wanting to be outdone by their bigger cousins - a superb view of a male Hen Harrier, and an equally superb view of a Cuckoo. And then there was the Kestrel, the Hoodies and a Raven.

The wee birds too were not to be ignored, with Common Whitethroat and Reed Bunting singing their hearts out, and Robin, Wren, Mistle Thrush and Bullfinch all seen along the forestry track as we drove back to the road. There was much debate about an insect, and absolutely masses of them crawling and flying all over the place. The last suggestion I heard was a Long-horn Wasp, but perhaps someone can confirm elsewhere in the Journal?!



It was actually a Long-horned Beetle. See Photo. Eds.

Operation Easter:

On Monday evening we had a fascinating and entertaining talk, full of Glasgow humour, from Constable Finlay Christine, the Wildlife Liaison Officer on Mull, albeit on a very serious subject. Operation Easter is a nationwide operation co-ordinated by the Police and aimed at convicting or deterring the main collectors of wild birds' eggs in the UK. Most UK forces are involved and draw heavily on the expertise of the RSPB particularly, in locating potential sites for egg thefts and identifying eggs recovered. The Forestry Commission and volunteers from the Mull community are heavily involved, as are tourists, by simply reporting anything suspicious.

Finally, and before the congratulations flood in, the photo above is NOT mine!! Much as I tried to digiscope with my new camera, I had mixed success, and failed to get any sharp, in focus pictures. But watch this space, I'll be out there practising!

Joanie Fairlie

ULVA - Tuesday

Our Mull holiday included an excursion to Ulva, a privately-owned island off the west coast of Mull. It is approximately seven miles wide and four miles long, linked by bridge to Gometra, a wee island of six square miles, NW of Ulva. During 1978-82 over 500 species of plants and 124 species of bird were recorded for Ulva and Gometra.

We took the one-minute ferry, from which we could see Mull's highest peak, Ben More, to the south. We were helped on and off the boat by the steady-handed ferryman, who was impressed that we were to be shown around Ulva by 'the Laird himself'. 'You will know him - he will have a stick.' There he was,

too, our handsome host, Jamie Howard, stick in hand, waiting for us on Ulva pier.

He told us that his grandmother, Lady Congleton had bought the war-neglected island in 1945. She modernised it, built up a prize-winning herd of Highland cows, and restored the church and houses, installing a reservoir to pipe water to them. The island then thrived, with at least three shepherds and a dairyman employed. But by 1995, of the mere 32 inhabitants, 16 were children who were ferried across each day to Ulva Ferry school on Mull, with the older ones going on to Tobermory. Now, in 2005, there were only 13 people on the island, in 7 households. Everyone has to run their own business. The island has farmed sheep, cattle, fish and oysters. Its economy is now helped by the tourist trade.

Jamie Howard wrote the *Visitors' Guide to Ulva*, which describes the island's history and lists the flora and fauna. He gave us a tour of part of the island.

Our walk passed through different habitats: woodland, marsh, sandy shore and farmland. The terraced landscape is the result of a volcanic eruption on Mull, near Ben More, nearly sixty million years ago. It smothered Ulva with layer after layer of molten lava, which cooled to form the basalt columns along the coast. The soil consists largely of crumbling basalt. A large cave exists in the SE of the island, which was inhabited as far back as 5600 BC. In 1779 David Livingstone's grandparents lived in it, while waiting for a croft house. David himself, of course, was born in Blantyre in 1813.

At the start of our walk some of us were lucky enough to see a Marsh Fritillary north of the boathouse. We watched a skein of Greylag Geese flying over. Jamie wondered whether it was the presence of the geese, or Mink (a big problem) which had stopped Gulls nesting on the island. He told us that White-tailed Eagles and Golden Eagles soar over the island, but we had no luck that day. We had seen these spectacular birds earlier, on Mull.



Narrow-leaved Helleborine
Cephalanthera longifolia

The highlight of the walk for me was the discovery of several Narrow-leaved Helleborine *Cephalanthera longifolia* in flower near a stone wall.

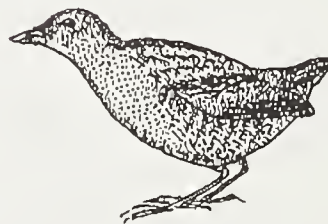
Other interesting plants I saw on the walk were Bog Myrtle *Myrica gale* and Ragged Robin *Lychnis flos-cuculi*, Star and Pill Sedges *Carex echinata* and *C. pilulifera*, Saltmarsh Rush *Juncus gerardii* and Hemlock Water Dropwort *Oenanthe crocata* in abundance. I saw Northern Marsh Orchid *Dactylorhiza purpurella*

flowers, and, in the woods, some Sanicle *Sanicula europaea*. I found Heath Spotted Orchid *Dactylorhiza maculata* and Bog Stitchwort *Stellaria uliginosa* and just one flower of Mountain Everlasting *Antennaria dioica* and several Fragrant Orchids *Gymnadenia conopsea*. In the little saltmarsh we found Sea Milkwort *Glaux maritima*, Marsh and Sea Arrowgrass *Triglochin palustre* and *T. maritimum* and Black Bog-rush *Schoenus nigricans*. There was some Sea Club-rush *Bolboschoenus maritimum*. We watched Four-spot Chaser Dragonflies flying around and a busy Whirligig Beetle on a pool. Its eye is split horizontally, the upper half looking out to air and the lower half spying underwater.

We were pleasantly tired by the end of the walk, so we visited the little teashop near the pier and were refreshed by cups of tea and delicious home-made cakes. We had a quiet visit to the Ulva Heritage Centre, which told us all about the island, its history and buildings, its walks and spectacular views. We had enjoyed our day immensely, before taking the ferry back to Mull and our waiting cars.

Mary Tebble

CORNCRAKE DAY ON IONA - Wednesday



Crossing time was to be around mid-day to allow plenty of time to look for raptors in Glen Mor. Low cloud scuppered that.

Once on the island we split into small groups, each hoping to hear and perhaps see a Corncrake. Reports of birds calling just up the road from the ferry and near the Abbey proved true and most of us spent some time staring into promising clumps of Yellow Irises; mostly to no avail. A lucky few did actually see birds, one on a wall, one crossing the road, and one was actually spotted in the Irises. Did anyone get a photograph? (Yes, Roger did! See photo page.) We had calculated that there were perhaps 6 calling males, but apparently research - info. from Joanie - has put the number at 22 over the whole island. The number of females and breeding success is not recorded.

Our more botanically-minded group set off to look for Spring Squill *Scilla verna* and Wall Pennywort *Umbilicus rupestris*. The Squill was found on a little knoll opposite a whitewashed roadside cottage. The original site is now fenced off, something we found in other places too. It seems some residents are tiring of so many people tramping around. Several times we heard the comment that the machair in particular had been spoiled by bad management, and we did see sheep and quite a lot of cattle at the north end of the island.

However, because we couldn't cross to the other side where we had hoped, we potted along an area of mini cliffs and there was the Wall Pennywort - or Navelwort as some books call it - in some profusion. It is a handsome plant, very much confined to the western coast in Scotland. Other reported sightings were Pale Butterwort *Pinguicula lusitanica*, also western; Globeflower *Trollius europaeus*; and for the birders, a Twite.

On the way home our car spotted Herons in flight and one magnificently antlered stag in woodland close to the road; but he vanished when we tried to take a closer look.

Jean Murray

STAFFA and the TRESHNISH ISLES - Thursday

We were a party of twelve, part of a full complement, boarding the *Hoy Lass* at the Ulva Ferry pier for our exciting sea trip. A jocular skipper welcomed us aboard. To the accompaniment of the whinnying trill of a Whimbrel flying nearby, we headed off from the pier around the south side of Ulva but soon slowed as an Otter, diving, catching and devouring crabs while relaxing playfully on its back, was espied to port.



Speeding on, the vessel passed skerries on which Shag were lined up. A diversion to try and spot a Minke Whale which was reported in the vicinity proved fruitless. As we approached Staffa after about 50 minutes, large numbers of birds were seen as a raft on the sea. Prominent among them were Manx Shearwater, but also Puffin, Guillemot and Razorbill. An hour was spent on Staffa, enough time to have a good look at Fingal's Cave and stand in awe at the rock formations creating and surrounding it. Then it was on to the top of the island where Bird's-foot Trefoil *Lotus corniculatus*, Heath Spotted Orchid *Dactylorhiza maculata*, Common Sorrel *Rumex acetosa* and Sea Campion *Silene uniflora* abounded. For those better endowed with auditory and visual acuity there was the extra delight of hearing and glimpsing a Corncrake, and hearing and watching a Snipe in drumming flight.

Travelling on to Lunga in the Treshnish Isles, the first surprise was the technique for landing. A pontoon was dragged by the boat and shoved on to the beach, which was covered by large rounded rocks, some bearing green slippery seaweed. Even with the help of the pontoon, getting ashore and balancing across the rocks was fairly arduous for some of the party. But the

experience on the island fully justified the effort in landing. The birds were just wonderful. Puffins, Razorbills and Shags took no notice of humans passing within a few feet, while Kittiwakes and Fulmars wheeled in flight around their nests on the cliff faces. Much time was spent trying to obtain the best photos of such amazing sights and the two hours allowed ashore soon passed. Along with more usual flowers Spring Squill *Scilla verna* was noted.

The sail back was round the north side of Ulva, an opportunity to see again some of the localities on the island that had been visited a couple of days previously.

Andrew Gilchrist

MULL: ADDITIONAL NOTE - Thursday

A small group headed for Croggan at the SW end of Loch Spelve where Betty Smith wanted to check up on a Dragonfly. The Southern Hawker *Aeshna cyanea* is rare in Scotland but has recently been discovered breeding in small freshwater pools close to the sea. We were too early in the year to see the dragonfly on the wing, but Betty was able to verify the presence of larvae in one of the pools.

The area also turned out to be rich botanically with wooded cliffs, marsh and boulders, the latter covered with cushions of a Leafy Liverwort *Bazzania trilobata* through which was growing Wilson's Filmy Fern *Hymenophyllum wilsonii*. Apparently Globeflower *Trollius europaeus* was growing on the cliffs further along; we didn't get that far, but were able to see Globeflower with other alpinists later in the day on the roadside Creag Mhor cliffs.

En route between the two sites we noticed some people gazing at the loch, joined them, and were able to watch an Otter feeding among the kelp. Altogether a good day!

Jackie Muscott

FRIDAY - LAST CHANCE DAY

Although we had already been lucky enough to see both Golden Eagles and Otters earlier in the week, we were still hoping that these two 'specials' would put on a show for our last day as we explored the area around Loch Spelve and Loch Buie. As the squawk-mobile travelled along the side of Loch Spelve, we must have been quite a sight, our heads constantly moving, checking the Loch, checking the sky, checking the Loch, checking the sky - oh, and of course watching the road as well! Many Buzzards gave us brief moments of excitement as they appeared over the skyline, doing their very best Eagle impressions, but all soon revealed themselves for the 'tourist eagles' that they were.

Reaching the end of Loch Spelve, having had some lovely views of Buzzards, Ravens, Wheatear, Ringed

Plover, and Rock Pipits to name but a few, we had to decide whether to continue to Loch Buie, or branch off and explore the Croggan road; we chose the latter and were soon proved to have made the right choice. As we drove along the waterside the Buzzards that had been trying to fool us into thinking they were Eagles, were replaced by interestingly-shaped objects in the water doing impressions of Otters! Then... 'That's a funny looking duck' followed very quickly by a screech of brakes as we realised that the duck looked strange because it was the head of an Otter !!

We continued, very slowly, along the road following his progress and desperately hoping that we wouldn't meet any other cars! Fortunately he was a very considerate Otter, and having caught a fish, chose to bring it ashore to eat at a convenient place for us to pull off the road. We were then treated to the most fantastic views of him happily chomping his way through the fish, totally unconcerned by our relatively close presence, allowing us to watch and even take a few (bad!) photos of him. After nearly half an hour he had finished his fish and took again to the water, still allowing us to follow his progress along the shore. Obviously the fish hadn't satisfied his hunger as he soon appeared with a pipefish, which he made short work of, munching away in the water. He continued his progress along the Loch, pausing only for another snack (unidentified!), before disappearing from our view. We had been able to watch him for nearly 1 1/2 hours, swimming, feeding and doing other otterish things. Unquestionably the best views I have ever been privileged to experience of Otters, or indeed any other mammal.

After stopping for a celebratory spot of lunch at Croggan, we continued back along the shores of Loch Spelve towards Loch Buie. Loch Buie is usually good for seeing both Golden and White-tailed Eagles, but I think we had used up our luck for the day with our Otter. However we did have some lovely views of a beautiful summer plumage Red-throated Diver on the Loch, and a very sweet little Lapwing chick in a field alongside the road.

All in all, a superb end to a superb week with so many wonderful sights and experiences.

Natalie Taylor



NATURE WATCH (2) Comma Butterflies

In the 2001 Journal, Lyn said that the latest Butterfly excitement was the arrival of the Comma butterfly in Southern Scotland, moving up from England.

We have had a number of these reported in the Journal since then, the furthest north being the one Connie Stewart saw in Caithness on 24th August 2002. Helen Knox had one feeding for long spells on *Erysimum* in her garden in Newhaven on 15th and 16th August 2004 (reported too late to be included in last year's Journal).

Margaret Watson saw one on Gullane Bents on 14th June, and Neville Crowther saw his first ever one at Bilston Glen on 24th August.

The earliest one seems to be the one we saw (Lyn and Sandra) on 23rd March this year in the Botanics - a lovely sunny day. We watched it for several minutes as it basked in the wintry sun on the path, as we did our weekly Phenology round. Jeff Waddell tells us that they are regularly overwintering in Scotland. (See Richard Buckland's article on Page 25)

But there was none so exciting as the one which visited our lunch spot on George's outing at Bara Loch (or were we visiting its home territory?) It kept us amused for about an hour as we ate our lunch and photographed and admired it. That was the day and spot where we saw hundreds (yes, hundreds!) of Common Blue Damselflies. A memorable day, indeed.





OBSERVATIONS 2005

JANUARY

WEATHER

	10th-13th - Storm force winds and lashing rain non-stop.	MR
	11th Hurricane in Western Isles with winds of 126 mph. Family of 5 drowned on Benbecula.	MR
1st	3 Shore Lark at Tynninghame.	BC
3rd	5 Redwings on Japanese Maple in neighbour's garden and c.100 Waxwings in neighbour's Poplar.	MC
3rd	Male Smew and a Little Egret at Vane Farm, Fife	BC
3rd	3 male Goosanders on Blackford Pond.	JM
9th	Scilla, Aconite, Snowdrop, Christmas Rose and Primrose in flower in Blackhall garden.	MR
10th	We had 90 Waxwings in Mavisbank.	TD
10th	Peregrine being mobbed by Kestrel over Duddingston.	NT
14th	Seventy-nine Whoopers in the fields east of Whitekirk, amongst them 9 immatures.	NC



BEWICK'S SWAN



WHOOPEE SWAN



MUTE SWAN

16th	Three 'House' Martin nests of last summer on the cliffs east of Tantallon. Winter Heliotrope <i>Petasites fragrans</i> flowering in abundance on the soft cliffs nearby.	NC
23rd	Flocks of Pigeons feeding on early Ivy berries in the Holyrood Park area.	JM
	Hérons reclaiming their nests by Duddingston Loch.	JM
24th - 17thMar	Flocks of Redwings, usually 100+ on the Meadows.	JM
29th	1 Yellowhammer in our back garden in Kirkliston.	RH
29th	Blackford: a female Merganser on the pond and a Green Woodpecker 'yaffling' in the Glen.	JM

FEBRUARY

3rd	First 4 garden Daffodils in flower.	MR
6th	A 7-spot Ladybird on Holly at Craigmillar Castle. Hazel and Alder catkin in flower. Fungus Group.	MR
10th	Sighting of a Green Parakeet with a large red beak - one of a pair on the Ravelston cycle track.	JM
12th	Kingfisher and male Smew at Duddingston Loch.	NT
19th	At Musselburgh, Coltsfoot <i>Tussilago farfara</i> and Oxford Ragwort <i>Senecio squalidus</i> in flower.	MR
20th	First sighting of a few of the Cream-spot Ladybirds sunning themselves outside cracks in the bark of the Sycamores in the Yellowcraig Woods.	MW
20th and 27th	Field Mouse feeding on peanuts at bird table in garden.	MR
27th	Mediterranean Gull and male Smew (still) at Duddingston Loch.	NT

MARCH

1st	Pair of Dippers - one singing its heart out - on the River Cocker, approximately 1 mile south of Cockermouth, Cumbria.	MP
2nd	Cow Parsley <i>Anthriscus sylvestris</i> in flower on waste ground, Maidencraig Crescent.	MR

3rd	Flocks of Pigeons still feeding on Ivy berries in the Holyrood Park area.	JM
4th	Blackford Glen: a Treecreeper foraging on a low wall by the allotments. Coal Tits taking Beech mast (which was abundant in 2004) from the ground.	JM
4th	Male Blackcap at my bird table all month until 28th; a Grey Heron perched on pole in neighbour's garden.	MC
6th	After two weeks of very cold weather the first Coltsfoot <i>Tussilago farfara</i> flowers seen at Roslin Glen, and bright green clumps of Wild Arum leaves <i>Arum maculatum</i> bursting from the woodland floor.	NC
8th	A Water Rail by a tiny pond near West Linton. Lots of Snowdrops <i>Galanthus nivalis</i> by the Tyne, and Goosanders on the river. Whooper Swans grazing near Tynninghame.	JM
12th	Mergansers on the lake at Gosford.	JM
16th	At Milkhall Pond the first frogs were in amplexus.	NC
17th	Large flock of Geese flying NW over Edinburgh.	MR
18th	After 'yaffling' all morning, a Green Woodpecker spent much time investigating nest holes in a dead Beech at Erraid Wood.	NC
18th	An Osprey flew nonchalantly north over Penicuik on the warm southerly winds.	NC
18th and 19th	Very mild weather - temperature 16C. A Peacock Butterfly and several Buff-tailed Bumble Bees on garden Pansies.	MR
19th	On Kinghorn coastal walk <i>Gloeophyllum sepiarium</i> , a wood rotter, on conifer logs. It has slits and not pores. Uncommon. (Phillips Page 234.)	MR
19th	Kinghorn: Rock-rose <i>Helianthemum nummularium</i> and Blackthorn <i>Prunus spinosa</i> in flower and Peacock Butterflies on the wing.	JM
19th	In the late afternoon two more Ospreys drifted north over Milton Bridge.	NC
20th	The Loch of the Lowes reserve reported the arrival of two Ospreys !	NC
22nd	Black-backed Gulls have returned; 2 seen on my neighbour's roof.	MR
23rd	Comma Butterfly basking in the sun on path, Botanic Garden, Edinburgh.	LB,SS
25th	Hairy Violet <i>Viola hirsuta</i> and Rue-leaved Saxifrage <i>Saxifraga tridactylides</i> in flower at Longniddry. 7-spot Ladybirds hibernating in plastic tubes round young trees at Craigielaw.	JM
27th	Male Smew still present at Duddingston Loch.	NT

APRIL

	April was a very cold dry month with northerly winds.	MR
6th	Waxwings in Merchiston.	JF
From 14 April	A Morel (probably <i>Morchella conica</i>) on bark mulch in 2 gardens in Corstorphine and 1 in Gorgie Road.	DA
18th	80 Waxwings at St. John's Hospital, Livingston.	JF
24th	A large patch of Rough Horsetail <i>Equisetum hyemale</i> discovered beside the River Almond - only the second surviving population in the Lothians.	JM



Waxwing

MAY

12th	In Cramond House grounds, lots of St.Mark's Flies over Garlic Mustard <i>Alliaria petiolata</i> ; Yellow Figwort <i>Scrophularia vernalis</i> and Bird Cherry all in flower and a Blackcap singing.	MR
14th	Reed Warbler at St. Abb's.	BC
17th	Barn Owl at Aberlady.	BC
26th	St.George's Mushrooms seen at Crow Wood, Vogrie, arguably over a month late. (St. George's Day is 23rd April.)	NC
31st	3 Fox cubs playing in a little wood near the Five Sisters Bing, West Lothian.	JM

JUNE

3rd	A young Great Spotted Woodpecker calling 'chip, chip' from a hole in an Ash tree on Ratho Park golf course.	MWo
10 & 12th	Young Fox in my very small back garden.	MC
14th	Comma Butterfly seen from the bridle-path leading from Gullane Bents to the shore. We watched it both flying and at rest, so identification was not difficult! A couple of minutes later, and only a short distance along the same path, we had a second sighting but assumed it was the same butterfly.	MW
15th	Red Kite flying over Salisbury Crags being mobbed by Crows and Gulls. Flew off west.	NT
18th	Two young Redstarts waiting for food at the foot of an Oak, Loch of the Lowes.	MWo
18th	One plant of Hairy Rock-cress <i>Arabis hirsuta</i> on Gullane coastal walk.	ENHS MR
19th	Skateraw: lots of 7-spot Ladybird larvae and chrysalids, numbers of 6-spot Burnet caterpillars and cocoons - some caterpillars in process of spinning.	JM
20th	Adult Ring Ousels carrying food in the Green Cleuch, Pentland Hills.	MWo
21st	Oyster Mushroom <i>Pleurotus ostreatus</i> growing on branch of Rowan in garden.	MR
25th	Nuthatch in the garden of Moffat House Hotel.	MWo
26th	At Milkhall Pond, a pair of Spotted Flycatchers started building in a nest hole in a dead Pine, only recently vacated by a family of Starlings.	NC
27th	An Adder, Dunbar Common.	MWo

JULY

1st	Redstarts feeding young, Adders sunning themselves and tens of scores of Peacock caterpillars on the nettles, all at Woodhall Dean.	NC
	A count of 5 adult Northern Brown Argus at East Lammermuir Deans was confirmation of successful conservation efforts.	NC
1st	Grasshopper Warblers - 4 separate locations on Longniddry Bents. 2 Nuthatches on a garden feeder at Dunglass. Seen by Andrew Lyburn and reported by Margaret Watson.	MW
6th	Temmincks Stint at Musselburgh.	BC
13th	Meldon Hills for Damselflies, a Dragonfly and Butterflies, including Common Blue, Ringlet, Meadow Brown and Small Heath, by a secluded pool and along forest paths.	MWo
16th	Swift migration: many birds flying over houses and trees about 5pm and later.	MR
17th	Swarm of Swifts and some Swallows swooping low through our Corstorphine back garden for a couple of hours.	DA
30th	A good colony of Heath Cudweed <i>Gnaphalium sylvaticum</i> discovered on Easter Inch Moss.	JM

AUGUST

4th	Little Ringed Plover, Musselburgh.	BC
7th	Nuptial flight of ants from 4 nests in Blackhall garden.	MR
7th	Two unusual Butterflies, Scotch Argus (7) and Dark Green Fritillary (1) recorded on the Tibbieshiels circuit.	NC
11th	2 Black-throated Divers, Musselburgh.	BC
13th	A White Ermine caterpillar noted at Calder Wood - and another by the Union Canal on 16th.	JM
15th	Albino Squirrel sighted on Water of Leith Walkway, west of Colinton.	JW
21st	Hundreds of plants of Fir Clubmoss <i>Huperzia selago</i> on Meall na Caora (Stuc a Chroin)	JM
25th	Buff-breasted Sandpiper at Tynninghame.	BC
24th	My first Scottish Comma, at Bilston Glen.	NC

SEPTEMBER

3rd	Little Ringed Plover at Aberlady.	BC
3rd	Nuthatch in a Yew tree, Darnick, Melrose.	MWo
6th	Barred Warbler, Musselburgh.	BC
9th	5 Sooty Shearwaters, Fife Ness.	BC



Baby Swallows - too wee to be away from Mummy!

10th	First Geese of winter seen in the afternoon. Peacock Butterfly in garden.	
	Very few Butterflies seen this summer.	MR
11th	Many baby Swallows perched on chains between the posts at Hopetoun.	MR
11th	George McDougall, Patrick and I found around 40x 7-spot ladybirds and 2x 11-spot ladybirds near Torphichen. The 11-spot is supposed to be a coastal species but we have found it at nearby Beecraigs in the past.	DA
24th	3 Red Admirals in garden - the first seen all summer and all in pristine condition.	MR
25th	Water Rail, Aberlady.	BC

OCTOBER

1st	Pectoral Sandpiper at Tynninghame.	BC
3rd	White-rumped Sandpiper at Bavelaw, Balerno.	BC
4th	Last sighting of Red Admiral in garden.	MR
7th	<i>Suillus flavidus</i> with Pine at Foulshiels Bing, Stoneyburn, W. Lothian. Previously, I have seen this fungus only in the Highlands.	MC
8th	5 Red Kites at Glen Artney.	MW
9th	I discovered two Small-leaved Ash trees on Silverknowes promenade. I usually look to the shore, but on this occasion I looked inland as there were no birds. The leaf stems were pink and leaves were yellowish-brown, features which attracted my attention. Brown buds confirmed the identification <i>Fraxinus angustifolia</i> .	MR
10th	Black Redstart at Torness.	BC
13th	Noon! Long-eared Owl perched on a fence at Blackford, Perthshire.	MW
13th	Paddyfield Warbler and Yellow-browed Warbler at Torness.	BC
14th	Kingfisher on Warriston weir, Water of Leith.	MW
14th	Earthstar <i>Geastrum striatum</i> , October 2002, reappeared in Dean Cemetery.	DA
16th	On a bright beautiful day, 3 Herons, two in flight, one standing silently, eerily motionless, on the bank, beak pointed towards the water, just waiting. Later two Goosanders floated upstream.	RC
25th	Dusky Warbler, Scougall, near Whitekirk.	BC
25th	Red-breasted Flycatcher at St. Abb's.	BC
27th	8 Tree Sparrows at Kilspindie. 1000+ Golden Plover, Aberlady.	MW
29th	Dipper singing on the burn beyond Loganlea Reservoir.	MW

NOVEMBER

5th	Several Goldcrest on Longniddry railway walk.	MW
9th	The Midlothian Jay population continues its expansion, with sightings at Vogrie, Glencorse and Arniston.	NC
10th	8 Snow Buntings, Musselburgh.	MW
13th	Red Admiral Butterfly on south-facing wall of my house.	MC
20th	The annual Grey Seal count revealed 33 live and 3 dead pups on Craighleith.	NC
21st	1 Great Spotted Woodpecker in garden at Kirkliston.	RH
23rd	Kingfisher on Pepper Burn, by Duddingston.	MW

DECEMBER

	Winter Stalkball Fungus <i>Tulostoma brumale</i> c.60 fruiting bodies at a known site in the dunes west of Yellowcraig. Nearby, Red-breasted Mergansers, Sanderling, Goldcrests, Goldfinches.	JM,MC
11th	A Dipper standing on a stone in Braid Burn, singing sweetly. I'd never heard this before.	JM
26th	Great Spotted Woodpecker drumming at zoo hilltop, the earliest I have heard this.	DA

DA	David Adamson	LB	Lyn Blades	RC	Roddy Clark
MC	Mary Clarkson	BC	Bill Clunie	NC	Neville Crowther
TD	Tom Delaney	RH	Roger Holme	JeM	Jean Murray
JM	Jackie Muscott	MP	Margaret Perry	MR	Mary Robertson
SS	Sandra Stewart	NT	Natalie Taylor	MT	Mary Tebble
JW	Janet Watson	MW	Margaret Watson	MWo	Molly Woolgar

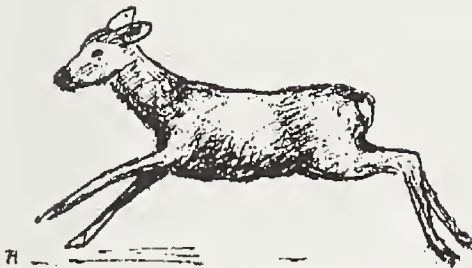
NAIRN 12th-16th June, 2006

Did you notice in Jeff's Naturalist's Diary (Page 20) - on 12th and 18th June - 114 One-flowered Wintergreen *Moneses uniflora* and an abundance of Small Blue and Dingy Skipper Butterflies in the dunes at Culbin Sands. The Nats will be there at that time in 2006. Look out for next year's Observations !



..... And BUS OUTING TO HOLY ISLE 8th July 2006

We are going to Holy Isle. Four of us visited this summer, and within 2 minutes of stepping out of the car we saw Dark-green Fritillary, Meadow Brown, Common Blue and Grayling Butterflies. That was only the beginning of a very interesting day. There were lots of lovely flowers too.



In October, while walking along Warrender Park Road I was startled to be overtaken by a Roe Deer moving fast. It shot up Marchmont Crescent and disappeared from view, leaving startled shoppers in its wake. Apparently it had run across the Links, but whence it came or where it went remains a mystery. Let's hope the poor thing found sanctuary - perhaps at Blackford Glen. Jackie Muscott



CLUBMOSES MOVE IN

On 16th September - Whitrigg Bing: when last visited (2002) parts of the bing were still relatively bare (with mosses and lichens). Young trees were appearing, but no obvious sign of Clubmosses. Now, however, large patches of Stagshorn Clubmoss *Lycopodium clavatum* have appeared, with small patches of Alpine Clubmoss *Diphasiatrum alpinum* and a few plants of Fir Clubmoss *Huperzia selago*. This must have been the pattern on many other bings, now overgrown. Jackie Muscott

NORTHERN EGGAR MOTHS

In July this year I had a number of sightings of Northern Eggar Moths *Lasiocampa quercus f. callunae*. The first time in early July was on Hoy in Orkney with a botanical group. Seeing some of the group in a little huddle round a tussock, I went over expecting to see an interesting plant, but they were all gathered round a couple of large moths. The male had been seen in flight and had alighted beside a female, so it was fascinating to see the pair. Males are dark with a lot of chocolate on the wings, while females are larger and mainly ochreous in colour.

A week later walking up Glen Cononish with another group, en route to the flower cliffs of Ben Lui, we became aware of a number of very large brown 'butterflies' skimming over the heather. Male Eggars again. A week later we saw them flying near the Lairige cliffs of Tarmachan in the Lawers range.

According to my book the moths are on the wing from May to July, the males flying on sunny afternoons and the females in early evening. In Scotland the larvae take 2 years to mature, hibernating as young caterpillars during the first winter, and in a tough cocoon during the second. They are large and hairy when mature, and eat Heather and Bilberry, Bramble and Willows.

Ref: *Field Guide to the Moths of Gt Britain and Ireland*, Waring & Townsend, British Wildlife Publishing

Jackie Muscott

NATURE WATCH (3) Singing Dippers

In last year's Journal, Geoffrey asked about singing Dippers, and we have had three responses:



Margaret Perry saw a pair of Dippers on the River Cocker, near Cockermouth in Cumbria on 1st March, one of which was 'singing its heart out'; Mollie heard one on the burn beyond Loganlea Reservoir on 29th October; and Jackie heard her first ever one, singing on a stone on the Braid Burn on 11th December.

These were all in the winter months. Geoffrey's research told him that they sing all year. Has anyone heard any at other times? Please let us know.

..... And NATURE WATCH (4) Frog Spawn

The only mention of frogs was Neville's Observation of 16th March: *At Milkhall Pond, the first frogs were in amplexus*. Did no-one find any frog spawn in 2005? Keep us informed please.

DIVING MALLARDS

During a walk along the Leeds-Manchester Canal, not far outside the city, we were watching a group of Mallards and noticed that several of them were feeding by diving and actually swimming a few yards underwater before re-surfacing. As I had never observed this behaviour before, I wondered whether, over generations, Mallards raised on a steep-sided canal, with no shallows suitable for normal dabbling in reach, eventually change from dabblers to divers. Have other members noticed ducks in similar habitats adopting this feeding method?

Margaret Watson

WINTER TALKS

26th January *Alpine Flowers in Western China*

Ron McBeath

Ron told us about his travels in China, illustrating his talk with superb photographs of the flora, scenery and people of the region. Not only did he show that this apparently arid and sparse landscape supported a wealth of lovely flowers, but he also gave us an insight into the local population and the kind of activities being pursued in this, for us, remote part of the world. The audience greatly appreciated spending an evening on a tour of the Orient.

Margaret Perry

23rd February

The published lecture was cancelled because of heavy snowfall in the Scottish Borders imprisoning the speaker. Jackie Muscott kindly stepped in at very short notice and addressed the meeting on *The volcanic Flora of Lanzarote, Canary Islands*.

Margaret Perry

23rd March *Raptor Rescue*

Ian Taylor

The term *raptor* stems from the Latin word for plunderer - 'raptare' meaning to seize and carry away. This provides a pointer to the most recognisable features of a raptor, which are its very powerful legs and feet, armed with needle sharp talons. They are also well known for their menacing hooked bill and although other birds have similar hooked or curved beaks and some have powerful feet, only the raptors have the combination of all this lethal weaponry.

Raptor Rescue has, since its inauguration in 1978, assisted sick and injured birds of prey which, when fully recuperated are correctly returned to the wild. The Trustees and rehabilitators from Raptor Rescue work alongside such organisations as the BTO, RSPB, RSPCA, SSPCA and IBR (Independent Bird Register {for falconer's birds}), police and local veterinary surgeons. The trustees also interact with government bodies (DEFRA & SEERAD) and the Hawk Board.

Like most wild animals, birds of prey fear man more than anything else, so the act of handling and examining a casualty will be very stressful and can cause an injured bird further shock. Shock can kill if not treated quickly whereas a bird will not die from a broken leg. This involves keeping the bird warm, allowing it to rest quietly and administering fluids. Intensive care units, which can be temperature-controlled, are used to minimise the stress when catching a casualty for treatment. At all times the welfare of the bird is paramount and at any time euthanasia may be the kindest outcome. Before the bird is released it must be fully fit and also released in the correct habitat. In some cases this involves the use of falconry methods to help build up the wing and chest muscles.

Raptor Rescue is a national charity with rehabilitators in most parts of the UK, and relies on public donations for its funding. On average, we take in 500 birds each year and release about 55%. More detailed information about the charity can be found on the web site www.raptorrescue.org.uk and the national help line number 0870 241 0609 can be used for help or advice about any injured raptor.

Ian Taylor

21st September

The new SOC Bird Watching Centre at Aberlady

Bill Gardner

To open our new season of winter talks we were pleased to welcome Bill Gardner of the Scottish Ornithologists' Club to tell us about the new SOC headquarters at Aberlady. The past few years have been a period of great change for the SOC, largely co-ordinated by Bill Gardner after his appointment in 2001 as Development Manager. With a remit to promote and develop the SOC, the majority of Bill's role was to oversee the creation of Waterston House, the new HQ of the SOC and Scottish Birdwatching Resource Centre. After the consideration of many different sites around central Scotland, Aberlady was selected as the best.

The innovative building was designed by the architects who were responsible for the Scottish Seabird Centre, and is a fantastic example of the stunning public buildings which can be created using native timbers. Many of the materials used in the construction of the building were donated, or provided at a reduced cost by a number of organisations, locally or nationally, both big and small. The majority of the £768,000 cost of Waterston House was raised through the sale of the old SOC HQ at Regent Terrace, with members' donations contributing the rest.

During his talk, Bill was able not only to tell us about the design and construction of the new building, but also to show pictures of the development of the site and the materials used.

Thanks to Bill for a most interesting insight into the ongoing work of the SOC and this exciting phase of its development.

P.S. Waterston House was officially opened by Magnus Magnusson on October 1st and our secretary Joanie Fairlie was present to represent the ENHS.

Natalie Taylor

26th October

Kola to Kamchatka

Geoffrey Harper

See Article pages 4-7

23rd November

Beaver Ecology

Martin Gaywood

Martin Greenwood of Scottish Natural Heritage had been hoping to describe the experimental introduction of European Beavers to a carefully chosen site in Knapdale, but the Scottish Executive recently vetoed the venture. However we heard about the research SNH has conducted into the behaviour and impact of beavers on the Continent. The European species of Beaver is protected under E.U. directives, and its numbers are gradually increasing on the continent. They are smaller than their North American counterparts and are less destructive, the dams they build across streams usually being smaller. Apparently they live in family groups and are reluctant to move away from 'home', so it was thought they would be well-contained in Knapdale during the trial period. They 'coppice' young trees in the vicinity of their lodges (which can be advantageous).

Jackie Muscott

CHRISTMAS PARTY

14th December

We held our Christmas Party at Guide Headquarters for the third year. Although invitations were sent to all our speakers and those outwith the Society who had led excursions throughout the year, none accepted.

We had thirty members there, which was considerably fewer than usual, but we seemed to be competing with other events in Edinburgh. Most people seemed to enjoy the evening, chatting and viewing John Watson's excellent images on screen, and Dorothy Stuart's photographs of outings, not to mention all the food and Natalie's home-made Christmas cake. The evening was hailed as a success.

Janet Watson

E.N.H.S. LIBRARY

Hello, this is John Watson, your new librarian, writing. I have been busy, during the winter months, checking the inventory and getting on top of the catalogue. It is very pleasant work, and not at all a chore. Personally, another of my winter jobs is to try to identify my numerous summer photo subjects. This is not always possible from pictures alone but it does no harm to have access to all of those books.

I hope to attend as many of the winter indoor meets as possible, and to bring along a small selection of books to show and lend. Any member wishing to borrow a particular volume should ring me 7 days prior to the meeting. At other times, or if a book is required urgently, please make contact and we may be able to work something out. Members wishing a copy of the catalogue can ring me for one—cost : £1.50 + Postage. (or free by e-mail).

John Watson

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watsons@currie95.fsnet.co.uk

or via Nats Website Address: enquiries@edinburghnaturalhistorysociety.org.uk

SOCIETY'S EQUIPMENT

In addition to books held in the Library, the Society has various other items which can be borrowed by members for their private use, including LP records of birdsong with accompanying booklet, and a recording of Grasshoppers.

Needless to say, members will be responsible for the care of books and equipment on loan.

Telescope:	A Bushnell Spacemaster of 20x - 40x magnification, in carrying case and a car window-mount for in-car use. Apply to Grace Jamieson , Tel: 0131 453 3434
Microscopes:	High and low power microscopes. Apply to Margaret Perry (Tel. 0131 447 3515)
pH Meter:	Apply to Elizabeth Farquharson (Tel. 0131 447 1994)
Mammal Traps:	Twenty-four small-mammal traps. Apply to Elizabeth Farquharson (Tel: 0131 447 1994)
Photographic slides:	A comprehensive slide collection left to the Society by Janet Raeburn. The subjects are mostly botanical but also include birds, mammals, butterflies and Scottish scenery. They are kept in the Library.
Bawsinch Key:	The Bawsinch Nature Reserve at Duddingston is managed by the SWT, who allow the Society to hold a key for members. Apply to Joanie Fairlie, Secretary Tel.: 0131 668 1470
Computer Scanner:	Apply to Sandra Stewart (Tel: 0131 441 2641)
Overhead Projector:	Apply to Betty Smith (Tel: 0131 440 0888)
Slide Projector:	Apply to Elizabeth Farquharson (Tel. 0131 447 1994)

ACKNOWLEDGEMENTS

About 40 people write articles, do outing reports and send us observations. We are very grateful for these contributions to the Journal. We must also thank Jackie Muscott and Eric Perry for their drawings, which greatly enhance the text..

We are sure that you will all agree that the photographs are lovely. The people we have to thank are:

PA	Patrick Adamson (age 12)	BB	Bill Bruce
GC	Graham Checkley	NC	Neville Crowther
RH	Roger Holme	MP	Margaret Perry
DS	Dorothy Stewart	JW	John Watson

Please note that the last date for contributions to next year's Journal, of articles and summer excursion reports, is the **31st October 2006**. It is important to keep to deadlines. If you have any ideas NOW, please let us have them as soon as inspiration strikes. If you see or find anything unusual, please let us know right away, for next year's Observations.

If you wish you can e-mail your contribution to journal@edinburghnaturalhistorysociety.org.uk If you do not have e-mail, you can send e-mails from any Library, and there is usually a Librarian on hand to help you.

Otherwise, give your contribution to Sandra Stewart or Lyn Blades with outing reports to Lyn, please.

Sandra Stewart 5 Thorburn Grove Edinburgh EH13 0BP Tel: 0131 441 2641	Lyn Blades 102/2 East Trinity Road Edinburgh EH5 3PU Tel:0131 552 6562
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..... and now an appropriate way to end -

THE TABLES TURNED

by William Wordsworth

Up! Up! my friend and quit your books;
Or surely you'll grow double;
Up! Up! my friend, and clear your looks;
Why all this toil and trouble?

The sun above the mountain's head,
A freshening lustre mellow
Through all the long green fields has spread,
His first evening yellow.

Books! 'tis a dull and endless strife;
Come, hear the woodland Linnet,
How sweet his music on my life,
There's more of wisdom in it.

And hark! how blithe the Throstle sings!
He, too, is no mean preacher;
Come forth into the light of things,
Let Nature be your teacher.

She has a world of ready wealth,
Our minds and hearts to bless -
Spontaneous wisdom breathed by health,
Truth breathed by cheerfulness.

One impulse from a vernal wood
May teach you more of man,
Of moral evil and of good,
Than all the sages can.

Sweet is the lore which Nature brings;
Our meddling intellect
Mis-shapes the beauteous form of things -
We murder to dissect.

Enough of Science and of Arts;
Close up those barren leaves;
Come forth, and bring with you a heart
That watches and receives.

Our thanks to Margaret Perry for giving us this poem.

